

## Transport Visions

# Land Use Planning

The third of eight reports from the Transport Visions Network

### Authors

---

Kiron Chatterjee, Mark Beecroft, Glenn Lyons and Greg Marsden  
Transportation Research Group, University of Southampton

### Editorial Board

---

Mark Dougherty	Hogskolan Dalarna, Sweden
Craig Drury	Oxfordshire County Council
Natalie Grohmann	Transport and Travel Research Ltd
Victoria Hills	Steer Davies Gleave
Greg Lee	Colin Buchanan and Partners
Paul Parkhouse	Arup
Annette Pedler	TRL Limited
Tim Ryley	Napier University
Mark Silverman	London Borough of Hillingdon
Dominic Stead	Technical University of Delft, the Netherlands

The Engineering and Physical Sciences Research Council, the Rees Jeffreys Road Fund and the Department of Transport, Local Government and the Regions, as sponsors of the Transport Visions Network, are very gratefully acknowledged.

---

The views of individuals conveyed in this report are their own and do not necessarily reflect those of their respective employers.

Published by  
Landor Publishing Ltd  
Quadrant House  
250 Kennington Lane  
London SE11 5RD

**First published October 2001**

© Landor Publishing  
All rights reserved.

No part of this publication may be reproduced without  
written permission from the publisher.

ISBN 1 899650 27 X

No responsibility for any loss as a consequence of any person relying upon the  
information or the views contained in this publication is accepted by the authors,  
contributors, or publishers.

Many of the photographs included in this report have been supplied by FreeFoto.com  
([www.freefoto.com](http://www.freefoto.com))

# Contents

Preface .....	5
Introduction.....	9
1     Settlement Form .....	15
A VISION:	
SPIDER WEB CITY .....	25
2     Where We Live.....	27
A VISION:	
THE INFORMED HOUSEHOLDER.....	39
3     Economic Push and Pull.....	43
A VISION:	
LOCATION, LOCATION, RELOCATION ..	52
4     Rural and Urban Environments.....	55
A VISION:	
SUSTAINABLE LOCAL LIVING.....	67
Conclusion.....	69
Acknowledgements .....	73
References .....	75



# Preface

**Futurology -**  
*the study or  
prediction  
of the future  
of mankind.*

1. At the beginning of the 21<sup>st</sup> Century, the UK transport profession in all its guises is very active. A Transport White Paper in 1998 set a new agenda to address the burgeoning levels of travel demand and motorised traffic. In the face of short-term workloads and objectives it is tempting to put to one side the potentially distracting business of transport futurology. After all, has not the time for debate and imaginative forward thinking now passed with the publication of the new White Paper? Is it not now time to begin 'bedding in' the new policies and practices that will serve us for the next decade or two? The answer is no. While action and not debate is urgently needed to address present-day problems, complacency about the future and the transport challenges it will bring must be avoided at all costs. Hence forward thinking remains crucial.
2. Reports documenting attempts to set out transport visions are not new and examples are plentiful. In the run up to the new millennium, many people contemplated the future of transportation and numerous documents were published presenting predictions and visions. In the UK, the RAC Foundation<sup>1</sup> convened an advisory group to assess the relationship between cars and the environment and to identify research priorities. The Engineering Council<sup>2</sup> set up working groups to examine challenges and solutions for the UK's future needs for transport. They started with a simple vision of 'access for all' and 'transport without costs' and identified what needed to be done to realise the vision, including a timetable for action. Within the Department of Trade and Industry's Foresight Programme, DTI<sup>3</sup> reports the work of a task force that examined the implications for transport of four different 'environmental' futures for the period 2010-2040. The task force produced recommendations for policy and research that were robust against each of the futures.
3. Meanwhile away from transport, ESRC<sup>4</sup> explored social and economic trends in Britain up to 2010. The Institute for Transport Studies at the University of Leeds<sup>5</sup> attempted to provide a vision for the future of transport in Britain for the next thirty years by interviewing those involved in transport about what might happen and how it could be achieved. The Europe 2020 group<sup>6</sup> considered the future of transport and communications in Europe. They considered the impacts on population, lifestyles, economy, environment, regional development, urban and rural form, goods transport, passenger transport and communications of three different scenarios - a growth scenario, equity scenario and environmental scenario.



4. David Banister<sup>7</sup> presented a 'Eurovision' for sustainable urban development and transport in 2020 developed via specifying environmental, regional development and efficiency targets, tracing through two paths towards the targets and back-casting to determine actions required to achieve them. William Garrison and Jerry Ward<sup>8</sup> offered their visions of transportation systems that will better serve the needs of the United States in the future. They include better ways of managing congestion, new types of vehicles, revised possibilities for cities designed to meet the varied needs of their inhabitants and different ways of moving people and freight over long distances.

5. What, then, is the justification for yet another transport visions report and indeed a series of reports? There are three principal justifications. Firstly, the world is an ever-changing place. The future is not predetermined and waiting to be discovered, it only becomes reality once it becomes the present. As such, attempts at transport visions must be regularly revised in light of the changes we experience, such as the emergence of mobile communications. The uncertainty of the future also means that no single vision can claim to be accurate. The only certainty is that transport and travel patterns will always be dynamic. Visions from a variety of perspectives enable a more informed consideration of the future.

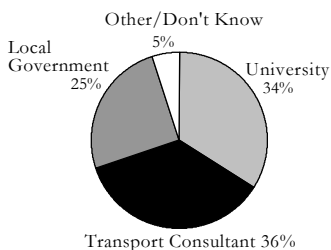
6. Secondly, we are at a propitious point in time in the UK. The present and pending acuteness of car dependence and traffic congestion and their associated effects has pushed transport high on the public and political agenda. Longstanding solutions to problems are no longer appropriate (at least by themselves) and politicians and other key decision-makers are prepared to listen to new and possibly radical propositions. The time is ripe for the imaginative thinking and innovation that can be derived from transport futurology.

7. Thirdly, almost without exception, all previous vision documents have been the product of senior professionals. Listed in the acknowledgements of such reports are the likes of Professors, Chief Executives, Chairmen and Directors. Conspicuous by its absence is the explicit acknowledgement of young professionals. All the reports in this series have been produced exclusively by young professionals - men and women aged 35 or under. Being 'young' does not give any special insight into the future. However, with young professionals comes the prospect of new ideas and perspectives that can potentially challenge existing mindsets. Furthermore, the young professionals of today will be the decision makers of tomorrow with a responsibility for delivering effective solutions. It is hoped that the act of engaging young professionals in a transport visions debate will in itself be of value to the

individuals concerned through assisting in their professional development and the forging of new professional relationships with important future influence.

8. This report and others in the series are a product of the Transport Visions Network. The Network was conceived by Drs Glenn Lyons, Kiron Chatterjee and Greg Marsden of the Transportation Research Group (TRG) at the University of Southampton. The TRG has been responsible for securing funds for co-ordinating and reporting on the Network. Funding has been kindly provided by the Engineering and Physical Sciences Research Council, the Rees Jeffreys Road Fund and the Department of the Environment, Transport and the Regions. The Network was established at the end of 1999 and formally began its business in February 2000 with the aim of addressing and reporting on eight transport 'themes' during a 30 month period. Membership of the Network has been open to anyone aged 35 or under. The membership predominantly consists of transport professionals who have a range of background disciplines and experience. Membership of the Network has totalled around 250 people with local authorities, transport consultancies and universities all well represented alongside other organisations.

Network Membership by Employer Type



9. The reader will find that the discussion is focussed on visions for the United Kingdom, reflecting the fact that the Network's founders are UK based, as are the majority of its members. Nevertheless, Network membership also has representation from a number of other countries including: Australia; Austria; Canada; Chile; Czech Republic; Finland; France; Germany; Greece; Hong Kong; India; Italy; Japan; Mauritius; Netherlands; New Zealand; Pakistan; Portugal; Republic of Ireland; Russia; South Africa; South Korea; Spain; Sweden; and the United States of America. We feel that our visions could apply in many respects to other 'developed' nations and possibly also to less 'developed' nations.

10. So, what do we hope the value and impact of our reports will be? Pragmatists might be anxious to determine whether or not the reports can shed any light on solving today's problems. Others might expect that our reports should abandon convention and offer truly provocative and far-fetched forays into a distant future. Perhaps we have been able to reconcile both of these aspirations. Our principal goal is to challenge existing mindsets and to reinforce the importance of forward thinking in transport research, policy and practice. We hope to reach a wide variety of audiences and provoke fresh ideas and perspectives. If we have been successful then our reports should help to influence current policy debate. We hope they will also inspire a stream of adventurous research proposals. Most of all we hope that our reports will enjoy a fruitful existence

as reading material before being consigned to join their predecessors on bookshelves gathering dust.



# Introduction

## To the reader in a hurry -

This report presents the Network's ideas on the role of land use planning in enabling better transport systems to be established in the future. The report has four main sections each of which deals with a different aspect of land use planning: settlement form, where we live, economic push and pull and rural and urban environments. In each of the sections a vision is outlined along with key parts of the discussion leading up to the vision. As well as having value in their own right, the intention is that the land use planning visions will provide a foundation for thinking about specific transport solutions in the subsequent work of the Network on (i) vehicles and infrastructure, (ii) local transport, (iii) long distance transport, (iv) freight and logistics and (v) economy, finance and equity.



11. The Transport Visions Network is exploring the future of transport in the 21<sup>st</sup> Century. The first report in this series, *Society and Lifestyles*<sup>9</sup>, considered a myriad of issues and trends that are shaping or have the potential to shape the way we live in the future and our travel needs. It presented six different scenarios for the future. In the second report, *Transportation Requirements*<sup>10</sup>, the Network set out twelve guiding principles for the design of future transport systems (listed at the end of this section).

12. In the remaining six reports the Network will explore possible solutions to current and emerging transport problems. The Network will not be seeking merely to guess or predict what the future of transport holds in store. In acknowledging that the future is not predetermined and is ours to shape, the reports will identify developments we would like to see and perhaps those we should guard against.

## The Network's Approach

13. Land use planning and transportation are very much inter-related and the aim was to come up with new ways of planning development that could enable transport systems to be developed in the future that serve our needs and overcome the transport problems we face today. The process of discussion that led to this report involved two phases of email discussion followed by a one-day workshop. In the first phase of email discussion Network members were invited to propose concept ideas of the following types:

- ◆ incremental;
- ◆ revolutionary; and
- ◆ doomsday.



14. The only background information provided was a list of land use topic headings which served to indicate the breadth of the subject open to consideration. The idea was to avoid the stifling of innovation and free thinking. In response to the proposed concept ideas other members were encouraged to provide feedback on the ideas in the form of support, disagreement, modification or further development. After the first phase, gaps and areas worth further discussion were identified and the email discussion was steered in the second phase by presenting Network members with issues to consider under the following headings (members were reminded that the discussion under each heading should be aimed at addressing transport):

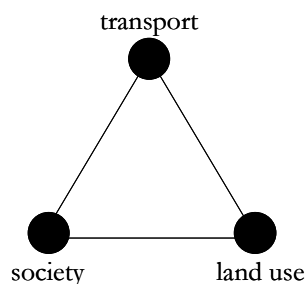
- ◆ settlement form;
- ◆ land use and society;
- ◆ land use and the economy; and
- ◆ land use and the environment.

15. The two phases of email discussion generated a total of over 200 email messages. The one-day workshop used the above four headings as a means of discussing the ideas already generated, developing them further and introducing new ideas. This led to four land use planning visions being identified, each comprising elements of the preceding discussion. This report presents the visions along with key parts of the discussion leading up to their creation. Quotations appearing in the text of the report without any attribution are statements made by Network members during either email or workshop discussion.

16. The first section of the report looks at settlement form. A vision is proposed of a pattern of land use that could be used in towns and cities to enable reduced travel and better transport systems. The second section addresses housing and sets out a vision for a system whereby we can all make better decisions of where to live. In the third section the business perspective is examined and a vision presented of a system of incentives to produce a more balanced distribution of employment. The final section looks at our rural and urban environments and proposes a vision of locally oriented living.

17. At the outset of the Network's deliberations it was recognised that as well as the transport and land use dimensions there is a third dimension that must be considered. This is society and encompasses social, economic, political, technological and cultural factors. As well as transport and land use influencing each other

## Transport, Land Use and Society



## The Policy Context



they are both influenced by society and exert influence on society. The triangle in the margin represents the three-way relationship.<sup>11</sup>

18. Recognising this three-way relationship prompted two questions. Which directions of influence are acceptable to pursue in our role as transport/land-use professionals? Which directions of influence are likely to be most effective? The questions themselves remain unanswered but the triangle of influence reminds us of the complex fabric of cause and effect that exists.

19. The complex relationship between land use, society and transport has created tensions which have influenced the direction of land use planning policy and practice for decades. The way in which land use planning is used to design and locate settlement form is a fundamental determinant of travel patterns and transport systems. Conversely, transport systems are a key influence on settlement form and alter the way in which they function. Before the car and the horse and cart, settlements were small in size but dense. The horse and cart and then the private motor car have led to radical changes to the way land is developed and changed the form of settlements. Planners and policy makers today appear to be faced with the problem of how to return to those settlement patterns of the past, whilst retaining the freedom of movement and the opportunities that we currently enjoy.

20. From the 1970's to the 1990's urban design was very much guided by transport with streets, housing estates, shopping centres and other developments designed to cater for private motor cars. Today there is increasing recognition that such an approach has not only resulted in unimaginative development patterns and degraded communities, but also in settlement patterns that are, at worst, entirely dependant on the car or, at best, suited to the use of the car.

21. In the UK the planning system operates through statutory plans, which provide incentives for the development of land by allocating uses and through various means of control which prevent development that goes against the public interest. Regional planning conferences are responsible for developing long term regional transport strategies and for developing Regional Planning Guidance, which sets out strategic policy for the region as well as standards for parking provision and public transport accessibility. These guide local authorities in producing development plan strategies and local transport plans.

22. The UK Government's planning policy guidance on transport (PPG13) states that *"by shaping the pattern of development and influencing the location, scale, density, design and mix of land uses, planning can help to reduce the need to travel, reduce the length of journeys and make it safer and easier for people to access jobs, shopping, leisure facilities and services by public*

*transport, walking and cycling"*<sup>12</sup>. It also sets out how the Government aims to make transport and land use work together more effectively. The main points of PPG13 can be summarised as follows:

- ◆ focus major generators of travel demand in city, town and district centres and near to public transport interchanges;
- ◆ ensure local day to day facilities are accessible by walking and cycling;
- ◆ increase intensity of development for housing and other uses at locations which are highly accessible by walking and cycling;
- ◆ ensure that development comprising job, shopping, leisure and services offers a realistic choice of access by public transport, walking and cycling, recognising this is less achievable in rural areas;
- ◆ locate rural development comprising housing, jobs, shopping, leisure and services in local service centres designated as focal points for this purpose; and
- ◆ use parking policies to promote alternatives to the car.

23. The delay in publication of the revised PPG 13 until March 2001<sup>13</sup> illustrates the difficulty of introducing major change to planning policy. Publication occurred some 18 months after a public consultation draft had been produced. Compared to the previous note written in 1994, it required greater consideration of alternative modes to the car in planning new developments and introduced maximum parking standards. The delay in publication was attributed to compromises being sought by business interests on the strictness of the maximum parking standards.

24. Planning policy guidance on housing (PPG3)<sup>14</sup> requires a sequential approach to be used to identify sites for housing, starting with the re-use of previously developed land within urban areas, then urban extensions and finally new development around nodes in public transport corridors. The Urban Task Force anticipates that 60% of new housing required between 1996 and 2021 will be accommodated on previously developed land<sup>15</sup>. Mixed use developments such as flats above shops are encouraged. Greater dwelling densities and more restrictive off-street parking provision than used in the past are required, especially at sites where there is good public transport accessibility.



25. Planning Policy Guidance on town centres and retail developments (PPG6)<sup>16</sup> states that city and town centres should be the focus for major developments that attract many trips. Local authorities should draw up development plans adopting a sequential approach to identifying sites for major new development. First

preference should be given to town centre sites where suitable sites are available. This is followed by edge-of-centre sites, district and local centres and only then out-of-town centres in locations that are accessible by a choice of transport modes. Where there is no development plan, the onus is on the developer to demonstrate that all town centre locations have been thoroughly assessed.

26. During the course of our discussions the Government published both an Urban White Paper<sup>17</sup> and Rural White Paper<sup>18</sup> which have considerable bearing upon land use planning policy. This provided useful food for thought for the Network and encouraged it to look beyond even the long term viewpoints contained in these reports. The White Papers outlined a range of initiatives to revitalise areas suffering decline and to ensure success is sustainable in prospering areas. The Urban White Paper included initiatives on facilitating better design, bringing brownfield sites back into use, looking after the existing urban environment, encouraging small businesses and providing quality services. The Rural White Paper included initiatives on reversing the decline in traditional rural services, providing information and communication technology (ICT) access to rural communities, ensuring affordable housing is available, promoting cooperation between rural businesses/farms and major business organisations and encouraging people to visit the countryside.



27. The Network also recognises the important role played by other government policy areas. Education and healthcare policies have resulted in a concentration of resources in larger facilities and in increased specialisation of facilities. This conflicts with the planning aim of providing local services and discouraging people from travelling long distances. The Network supports the Government's vision of 'joined up government' but feels there is a long way to go in achieving a co-ordinated approach to land use planning.

28. In thinking about new concepts and solutions for land use planning, Network members have kept in mind the twelve Transportation Requirements set out in the second Network report<sup>19</sup>. These are listed below.

### **Transportation Requirements**

- 1 There should be an equitable distribution of access to a range of key real and virtual destinations that support people's quality of life.
- 2 The absolute level of resource use for transport activities should be controlled and the resource efficiency of mobility should be maximised.

- 3 Users should pay the full internal and external costs of transport and these should be made transparent. Where appropriate, transport uses or users providing external benefits should be subsidised.
- 4 In the provision and operation of transport systems the adverse effects on the environment should be minimised according to agreed principles and targets.
- 5 There should be discrimination and prioritisation between different types of trips and activities.
- 6 Transport should not exacerbate the adverse effects of lifestyle on health and safety and should aim to reduce these effects wherever possible.
- 7 Electronic and other non-mobile means of communication should be considered as transport options and treated accordingly in policy and practice.
- 8 Land use efficiency should be maximised and net land take by the transport system minimised.
- 9 The reliability of the transport system and its operation should be regarded as a fundamental system management goal.
- 10 Transport should not exacerbate problems of social participation and should aim to reduce these problems wherever possible.
- 11 Stakeholders should play an integral role in the entire life cycle of problem identification, solution formulation, implementation and evaluation.
- 12 Transport users should be enabled and encouraged to make fully informed choices.

# 1 Settlement Form

## Introduction



29. Settlement form is the arrangement of our living environment, it concerns the size, layout and design of our cities, towns and villages. This section presents the Network's views on changes to settlement form that will help in meeting the Transportation Requirements that it has identified for the future.

30. Studies of the relationship between land use and travel provide the following general findings<sup>20</sup>:

- ◆ distance travelled and use of the car decreases in areas of high population density;
- ◆ distance travelled decreases in areas with greater provision of local facilities;
- ◆ trips are shorter and made less often by car in large settlements (very large cities appear to be an exception where longer trips are made than in smaller cities);
- ◆ within a city, trips made are shorter in the inner area, increasing towards the edge and decreasing again at the periphery where stand-alone towns are located;
- ◆ people living close to a bus stop or railway station make a lower proportion of car journeys; and
- ◆ trips are shorter and made less often by car in areas of compact mixed use (e.g. areas close to city centres).

31. A study looking at the effect of both land use and socio-economic characteristics on travel patterns suggests that some caution should be exercised regarding the effect of settlement form on travel<sup>21</sup>. The study used cross-sectional data for areas of the UK to show that socio-economic characteristics (gender, age, income, car ownership, etc.) explain about one half of the variation in travel distance per person, whilst land use characteristics explain about one third of the variation. This research indicates that there is a set of interactions between land use, socio-economic characteristics and travel patterns, and the influence of land use on travel patterns may be lower than other studies suggest. It is acknowledged that in combination with other policies, land use planning may still have substantial scope to influence travel patterns.

## New Development

32. The Network agrees with the UK Government's priority for first seeking to locate new development in existing urban and rural settlements and then in extensions of existing settlements. Extensions to established settlements can be connected to existing transport corridors. The extra travel generated is likely to be less

than for new settlements (such as towns built at the periphery of major urban areas) which initially will not be of a scale able to support many services desired by their population.

33. Transport Development Areas (TDAs)<sup>22</sup> have recently been accepted as having an important role to play in achieving current transport and land use planning goals. They are defined as 'well designed, higher density, mixed-use areas situated around good public transport access points in urban areas'. Their development is dependent on the introduction of public transport improvements at the same time as securing property development. The Network supports this initiative.

## Merits of Zoning



34. The Network considered whether zoning of land uses is appropriate. Zoning leads to clusters of similar activities in the same area and can mean the population served by the activities have to travel large distances to reach them. Clustering occurs for many reasons. In the past, land use planning aimed to group industrial activities together and segregate them from other land uses such as housing because of their incompatibility. Clustering can happen for economic reasons of efficiency and scale as businesses engaged in related activities (suppliers, manufacturers, partners, etc.) locate together in local networks. This is known as 'institutional thickness'<sup>23</sup>.

35. Clustering also occurs where businesses are trying to attract similar customers (e.g. retailers grouping together to enable comparison shopping). The Network believes there is now a much greater opportunity to mix land uses. The decline of heavy industries, improvements in construction techniques and the move towards a service and ICT driven economy mean there is now less concern about the incompatibility of different land uses. The mixing of housing with other land uses should be given encouragement as it can lead to people travelling shorter distances for everyday activities. As well as positive transport implications, facilities that are well used by local residents will help to foster a more inclusive society where people living close together integrate more freely. A note of caution needs to be made though. The availability of facilities near to where people live does not on its own guarantee that people will use them.

## 'Couleur Local'



36. The Network emphasises the importance of the principle of 'couleur local' or local distinctiveness for land use planning. This means that although there may be models of settlement form that can be recommended, we should remember that the application of these should vary in different places. Planning should take regional characteristics into account (e.g. locally sourced building material, respect for historic features) so that a place can develop and



maintain a unique identity. With an increasing amount of leisure time available in our lives, planning must not only aim to satisfy basic needs through provision of employment opportunities and health and education services, but also to provide developments offering interesting and pleasurable opportunities. Without these a place is unlikely to be successful in attracting people to live or visit.

## High Density Housing



37. The Network sees higher density housing as an important part of future settlement form. It is vital that this is designed to be appealing to a broad cross-section of people so that communities can develop and thrive. High rise housing developed a negative reputation as a result of developments constructed in the 1950s, 1960s and 1970s. Currently, a lot of new housing is being built in central urban areas in the form of apartment buildings with three or four storeys. This is the classic 'continental' style apartment block, which is highly popular and in widespread use throughout much of mainland Europe. Housing of this kind can result in an overall density similar to that of high rise developments, since it does not require such large areas of surrounding open space for recreational use and parking.



38. The potential for building 3-D cities is emerging with advances in building construction techniques. Super skyscrapers will use root-like foundations and have surrounding lakes to absorb ground vibrations. The towering inferno syndrome will be prevented by using sealed compartments. A 'bionic tower' is planned for Shanghai<sup>24</sup> which will house 100,000 people on 300 stories at a height of 1,100 metres. It will contain shopping malls and car parks at its wheel-shaped base and also have hotels, offices, cinemas and hospitals. The attractiveness of 3-D cities as places to live could be increased if surrounding land is landscaped for recreational use without the need for parking. This should be possible in central urban areas where ownership of private transport is less necessary and alternative forms of mobility are readily available.

39. There is potential for housing accommodation to be built at a vertical scale somewhere between the 2-4 storey buildings currently favoured in the UK and super skyscrapers. In continental Europe blocks of flats often have 5-7 storeys with services (shops, cafes, laundries) on the ground floor. Building costs remain reasonable and a higher density is achieved.

## Skywalks



40. Skywalks could play an important role in city centres. In Minneapolis-St Paul it is possible to traverse a large portion of the city at first floor level with direct access to offices, shops and services in a controlled environment, whilst temperatures are sub-zero outside. Acceptable walking distances increase and large areas

of linked mixed use development are able to be served by street-level transit systems.

41. Another way of facilitating high density development is by using underground pathways. Cities in Canada such as Vancouver and Montreal have underground pathways connecting buildings. Ottawa has a system where a part of the urban centre is covered in the winter but uncovered in the summer. The potential value of skywalks and underground pathways is that they could provide a more comfortable environment which encourages increased walking distances and makes accessing public transport simpler, reducing the need to travel by personal motorised means inside city centres.

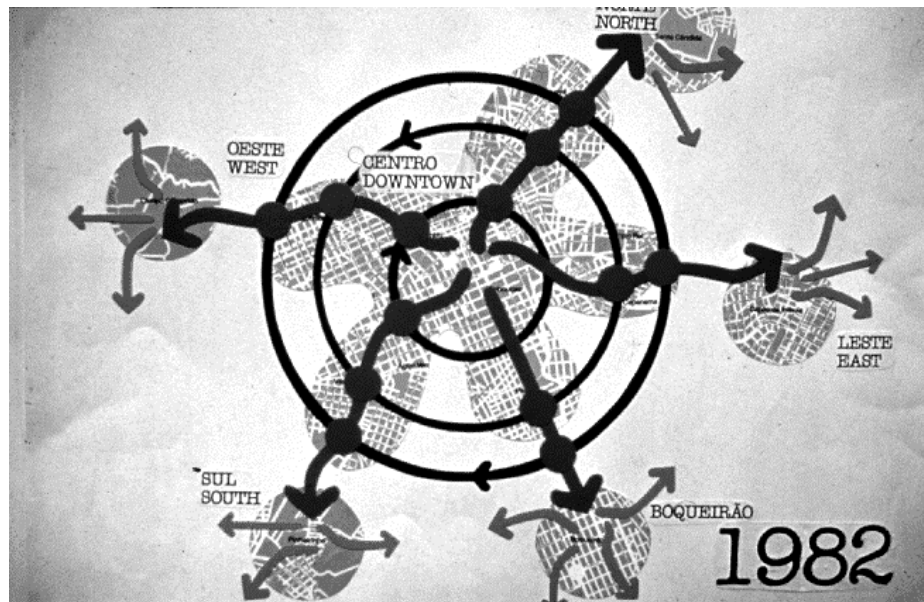


42. The use of skywalks or underground pathways would not be aimed at freeing up more space at ground level for cars or parking but for high quality public transport infrastructure and open, recreational space. Otherwise there is the danger that they would simply remove pedestrians from roads at street level and encourage more vehicles to use the roads. There are scenarios to guard against concerning skywalks and underground pathways. To safeguard security their use could be restricted to those people with business in the buildings to which they are linked ('Gold Card holders'). However, this could foster a more divided society. There are also urban design implications of accommodating highly visible skywalks within the cityscape.

## World Examples



43. The Network discussed some global examples of settlement form which may offer useful lessons for the UK. Curitiba in Brazil is an example of a city carefully planned around public transport<sup>25</sup>. It has been developed around five radial routes (spines). To accommodate the travel needs of its growing population the authorities opted for express busways instead of an expensive subway system along the spines. These busways are separated from adjacent all-purpose road lanes. The centre of the city has been extensively pedestrianised. High rise office and residential buildings have been promoted along the five busway routes. Medium rise buildings (four to six storeys) have been promoted within three to four blocks of the spines and beyond that the main uses are low-rise residential housing and small businesses. There are connector buses linking neighbourhoods to the busways and other fast buses linking neighbourhood centres.



The Curitiba system of structural arteries as expanded in 1982<sup>26</sup>.



44. Copenhagen is also an example of a city planned around public transport. The Finger Plan<sup>27</sup> was introduced in 1948 for slum clearance and urban development as part of the fight against a widespread housing shortage<sup>28</sup>. The idea was to create a city with housing and commerce positioned along radial roads and railways, retaining large green areas towards the centre of the city. The Finger Plan now provides for continued development around the railway stations of the S-train network where easy access can be sustained. The Finger Plan also provides for the continued protection of the green wedges between the fingers.



45. Seattle adopted the Seattle Comprehensive Plan in 1995<sup>29</sup>, a 20 year development plan for the city. It features an Urban Village Strategy which involves incrementally changing the city's development while increasing the completeness and competitiveness of the intermodal public transportation system. It promotes compact, mixed-use neighbourhoods. Urban centres are intended to be the densest areas with the widest range of land uses. They contain urban centre villages which vary in character. Hub urban villages are also intended to accommodate a broad mix of uses, but at lower densities than centre villages and at intensities appropriate to the stage of development of the area. Residential urban villages are intended for concentrations of low to moderate densities of predominantly residential development with a compatible mix of support services and employment. In some instances, the urban village designation is intended to transform car-oriented environments into more cohesive, mixed-use pedestrian environments. As well as urban villages there are areas designated for manufacturing/industrial uses and areas earmarked for only limited development, although they also have designated neighbourhood anchors to focus services and public transport.

46. Welwyn Garden City with its wide tree-lined roads and neo-Georgian buildings is an example of Sir Ebenezer Howard's garden city concept<sup>30</sup>. The concept is a self-contained community of pre-determined area and population surrounded by a greenbelt. It was intended to bring together the economic and cultural advantages of both city and country living. The idea spread rapidly in the UK after the Second World War with new town developments, but it commonly resulted in low density residential suburbs of individually owned homes with many residents commuting to work in larger centres.

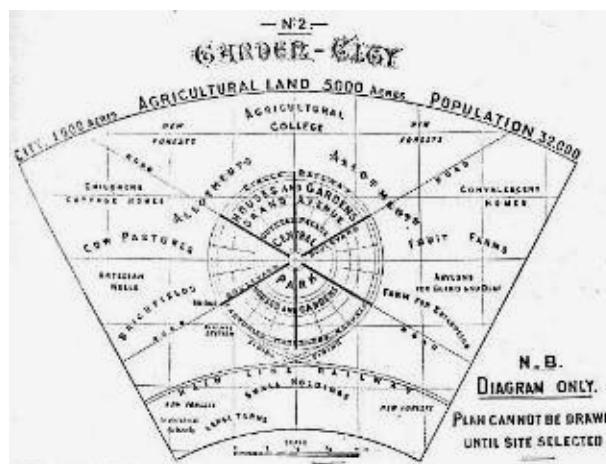


Diagram from Sir Ebenezer Howard's *Garden Cities for To-morrow*<sup>31</sup>.

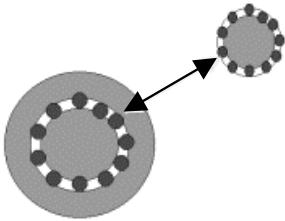
## Greenbelt Garden Village



47. After looking at these world examples, the Network proposed some future concepts for settlement from. The Greenbelt Garden Village is a concept designed to preserve the quality of land surrounding urban areas while making productive use of it. It could play a role in preventing unsustainable rural development elsewhere. The concept is that green belt land currently earmarked to remain undeveloped, as it provides a buffer zone within or around a conurbation, is allowed to be developed but only according to strict guidelines. Mechanised transport and industrial activity are not permitted and the character of the land has to be preserved. What is permitted are 'garden villages' with small-scale agriculture and business uses. The agricultural products and business services serve the adjacent urban area.

48. Within the villages cycling and walking are the predominant modes of transport. Interchanges at the periphery of the urban area provide access between the villages and urban area. If successful, the ideas tested in these villages could be adopted elsewhere (e.g. in transforming brownfield sites in urban areas). To ensure net land take gain the concept could be extended to include a land swap policy whereby greenfield land is only made available for such development if an equivalent amount of brownfield land in an

## Homer's Donut



urban area is developed as a public open space. This would ensure that there was no overall loss of open space.

49. The concept of Homer's Donut was proposed as a possible model of urban form. At the core of the city is a residential area rather than a commercial area. This predominantly consists of high density housing development interspersed with park and open spaces. Around the central ring of approximately 1 km radius (or wider if some form of easy access to the outside of the ring can be provided) is a ring of development served by a transit system. Each stop is predominantly based around one type of use e.g. Shopping Zone, Office Zone, Sports Zone, Entertainment Zone, Health Zone, Grocery Zone, University Zone. The zones create an attraction density sufficient to make a high quality, high capacity public transport system viable. A further ring of residential development follows and is located within walking or travelator distance of the inner ring. Moving further outwards there is a second development ring with light industry or distribution depots providing good access to inter-urban transport networks. Dependent on the size of the city, more residential areas and a third ring could follow.

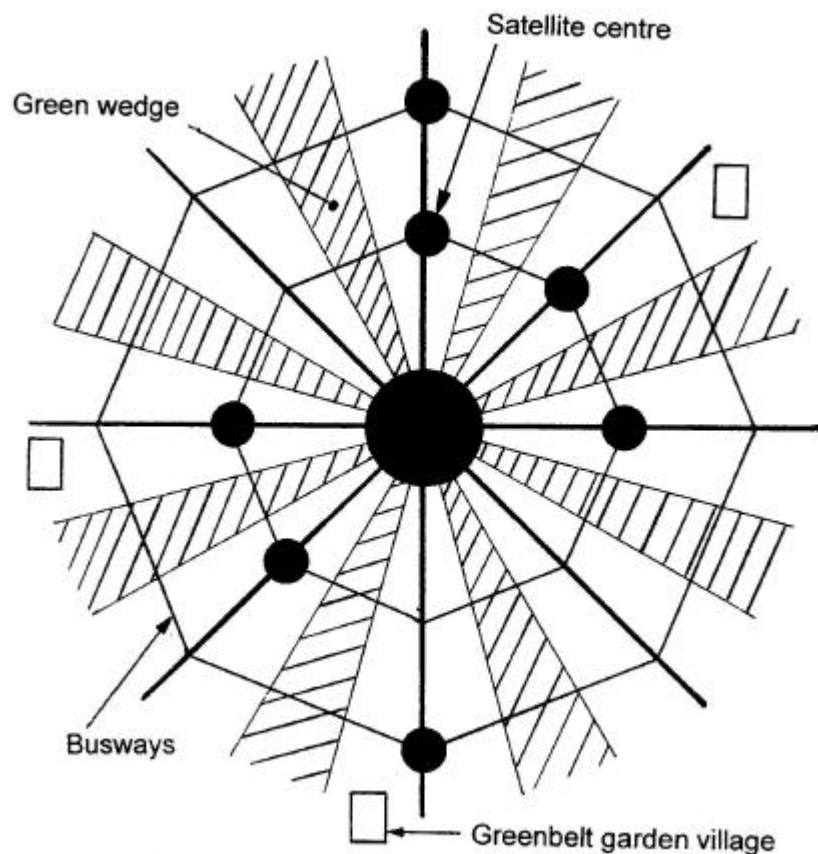
50. Rings of development are linked through high quality public transport enabling easy access around the city, provided one of the rings can be reached. Access to the central ring by private motor vehicle is highly restricted e.g. subterranean stacking car parks on the perimeter, which potentially deliver your vehicle to the out-facing node from which you wish to leave. This concept represents a departure from the objective of mixed use development. It is aimed at addressing the fact that in many towns and cities cross-suburb transport routes do not have enough passengers for high quality transit systems, as most commercial development is focussed in the centre.

## Spider Web City

51. An alternative concept for urban settlement form was proposed that avoids Homer's Donut's zonal approach. It incorporates some of the ideas currently finding favour amongst urban planners and which have already been described. The Spider Web City is intended to offer a settlement form that removes the need for its residents to own personal motorised transport. It has a dense core of mixed development connected to the rest of the city through radial transport links, along which satellite centres lie. Between the radial links lie green wedges. Journeys between the radial links (cross-city journeys) are possible via footpaths that can be used by pedestrians, cyclists and other slow forms of transport and via rings of limited access busways spaced out at regular distances from the city centre. Greenbelt Garden Villages are located at the edge of the

city. The city centre has national rail and express coach infrastructure to connect the city to other parts of the country.

52. At its centre the Spider Web City has mixed development of retail, offices, leisure and housing. This area concentrates all functions that attract residents from all over the city and is developed at high density. There are high capacity, radial transport links spreading outwards from the city centre. Transport within the central area could be provided by surface public transport or personal rapid transit (PRT).



The Spider Web City

53. Development along the corridors is mixed use and high density. Facilities and services located here are able to draw customers from their immediate area and from the people using the radial transport system. Residents living close to the corridors would be able to access the city centre quickly using the radial transport service. At certain points along the corridors satellite centres are located that act as the hub for their area. Parking is limited so that people are not encouraged to drive to satellite centres outside their neighbourhood. Although there are mixed land use functions along the radial corridors, the satellite neighbourhoods are able to have their own distinctive character, reflecting their history. Specialised

characteristics might include education provision, leisure facilities, new technology parks and food manufacturing.

54. Moving away from the immediate vicinity of the radial corridors there is residential development at relatively lower densities and the green wedges separating the corridor development. The green wedges extend all the way from the city centre to the city edge and include routes that can be used by slow modes for accessing the city centre.

55. The question arises as to how the Spider Web City can be achieved given the land use patterns that we have today. When cities first grew, they tended to develop in a similar way to the Spider Web City with concentrated centres connected to outer areas by radial routes. The natural desire for more spacious homes along with widespread car ownership have changed this pattern of development and resulted in sprawling suburban housing estates, orbital highways and peripheral shopping and leisure super parks. The current trend towards re-urbanisation provides a natural opportunity to use the Spider Web City as a vision to aim towards. It would be an incremental process of gradually introducing better quality public transport along radials, reducing or phasing out roadspace for private motor vehicles and increasing building densities along transport corridors. Orbital highways could not be removed overnight but could be incrementally downsized as land use patterns change. Other developments that could stimulate the evolution of the Spider Web City are high rise mixed use development in the city centre (perhaps with 3-D cities and skywalks), tenement housing along radial corridors and lower density courtyard style housing within outer neighbourhoods.

56. The capability of fast and efficient movement by public transport from one outer area to another is important to the viability of the Spider Web City concept, not least in enabling orbital highways to be taken out. There are cross-radial busways, but these might not provide a sufficiently quick, direct and convenient connection for some journeys. An efficient interchange system in the city centre is crucial to the Spider Web City concept and will enable cross-city journeys to be made relatively quickly, despite the longer distances involved in travelling via the centre.

57. The Spider Web City vision involves a car-free city centre which frees up space for a variety of other functions. In the long term, people will not need to use cars at all to access the centre but, during the transition towards this, some park and ride facilities are required. These are best distributed fairly evenly at different satellite centres along radial routes and at sites on the city periphery adjacent to what will evolve to be the greenbelt garden villages. Where

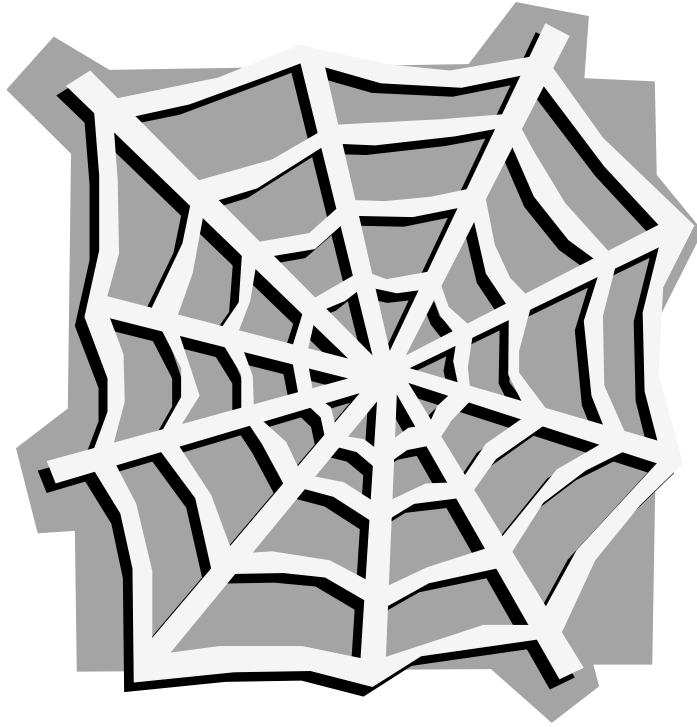
parking is required, this could be accommodated in underground parking carousels to reduce land take and enable the development of the non-transport development characteristic of the Spider Web City vision.

## **Planning for Change**

58. Bringing about significant changes to settlement form will require a fundamental review and reform of the planning system. This will be essential to achieve the transformation from a system concerned with controlling new development to a system that can help to fulfil a vision of settlement form. At present only in exceptional circumstances can planning intervene directly to acquire land to allow development to occur (Compulsory Purchase Order).



## A VISION: SPIDER WEB CITY



59. The 3-D City Dweller - "Last week I went up to the top of Cloudbreak City for the first time. Well the observation floor had only just opened. I moved in to the city ten years ago when I started renting my apartment on the 120<sup>th</sup> floor. Now they've finished all 300 floors, I had to have a look. As promised, I was literally above the clouds when I went up there. Next time I'll go when it's a clear day and I can see the view.

60. They're quickly building up the twin city tower at the moment. I hope that they stick to their word and ensure that my privacy is not compromised with people at my level looking straight into my apartment. I haven't been outside the city for a few days. I went to the 5<sup>th</sup> floor doctor the other day to have my all-over health check. Otherwise I've just been to the office on the 83<sup>rd</sup> floor. I need to go to Head Office over at the West Side of the City - I mean the West Side of Arachnia City Centre, not Cloudbreak City. I could go outside and skate over and if it rains switch to the skywalks. Or maybe I'll take the PRT."

61. The Satellite Centre Dweller - "I enjoyed spending time at the weekend in Beechwood forest. Now they've restored the forest, people realise where we got the name for our neighbourhood. I cycled over there with the kids. We took a picnic with us. I really enjoyed the fresh strawberries that we're getting from the village outside the city. Its much better than than the tasteless stuff we got before imported all the way from the continent. On the way back from the forest we visited my aunt in her semi on the forest side. Its nice she's got all that space for herself, but like most people these days I prefer not to have the hassle of looking after a garden.

62. They made the decision today not to go ahead with a new stadium for our football team. We're going to continue to use the Central Gardens Stadium shared with the other two teams. They argued that the central location of that stadium meant that it provided easy access for supporters from all across the city. To have the stadium here would have meant increasing the capacity of the Shuttle Rail system along this side and after all the care taken to develop this area that would have spoilt everything. Yesterday I visited the newly completed Observation Tower on Cloudbreak City. Wow, what a view! It was a cloudless day so I could see for fifty miles as far as the next city. What's its name? Fibretown, I think? I forget its name as I never need to go there."

63. The Greenbelt Garden Village Dweller - "When we first moved here I thought we would always need to keep a car at the interchange point, but when they built the improved metro interchange we haven't needed to have a car here. We can still get into Arachnia quite easily. It takes forty five minutes. A 15 minute walk across the fields and a half hour journey in on the metro.

64. We thought we might convert over to food produce but found we're still happy with working from our home here. Living here, we have the benefit of a garden and use some of it to grow strawberries for sale in the city."

## 2 Where We Live

### Introduction



65. In this section the Network considers the topic of housing and looks at ways in which housing can be planned to deliver positive benefits for transport and to society as a whole. The Government's White Paper on housing sets out the aim '*to offer everyone the opportunity of a decent home and so promote social cohesion, well-being and self-dependence*'<sup>32</sup>. The main themes of the preceding Housing Green Paper were quality and choice - quality through better homes and better services and choice through people being given greater involvement in, and control over, their housing. The issue of choice is a recurring theme in this section but with the Network regarding it in a different light to that mentioned above.

66. For the vast majority of journeys made, the home is either the origin or destination. Consequently the choice of where to live can have significant impacts on a household's travel. More specifically, it is the location of the household relative to the workplace, preferred schools, shopping and leisure facilities and other trip destinations which determines household travel. Purely from an overall transport perspective, the configuration of such locations is rarely optimal in terms of total distance travelled or external costs incurred. As locations of activities change over time there is the added potential for the situation to become even less optimal. Locational decisions, and in particular where we choose to live, have a long term effect on travel demand, influencing the distance and mode choice of a huge number of trips made by household members over time. In principle, it should be possible to assign individual households to the available housing stock in such a way that the resulting levels of travel are reduced or travel demand is more desirably distributed both spatially and across modes. However, dictating where people should live is untenable in a society that jealously guards its right to freedom of choice (even though such freedom of choice is rarely equitable across the population). Nevertheless there must be potential to promote residential (re)location decisions that benefit those (re)locating as well as society as a whole in terms of transport.

### Changing Lives, Changing Housing Needs

67. Demand for travel arises from the need or desire to participate in activities. Over time the needs and desires of a household are apt to change as indeed is the composition of the household itself. Change can, to a large extent, be attributed to a sequence of life stages which might, for some people, be similar to those below:

- ◆ *young single adult living alone*: Prime activities are work/education and leisure: nightlife and meeting other

young people is a priority; travel is predominantly by public transport and taxi.

- ◆ *young adult living with partner*: Increased income, leisure activities change and spending time with each other and other couples is a priority; car ownership is affordable and car use, though not essential, increases. Public transport use begins to diminish.
- ◆ *living with partner and young family*: Time becomes a premium and patterns of activities are centred around the children; car use is seen as essential. Public transport use diminishes substantially, particularly for trips involving children.
- ◆ *living with partner and teenage family*: Divergent patterns of activities for parents and children with increased demands on car use. Household car ownership has increased.
- ◆ *middle aged living with partner*: Children have left home; increased affluence and further changes in activities. House size and car ownership in excess of that required.
- ◆ *retired couple*: The daily commute(s) disappear and the absence of the work activity leads to routines and patterns of activity being redefined with greater flexibility. Time is less of a premium; activity pattern in part is shaped by role as grandparents. Public transport use increases as fewer daily commitments leads to reduced car dependency.

68. If households were to consider moving homes at times corresponding to life stage changes, then they would arguably be more inclined to assess the accessibility of new home locations in relation to their changing needs and activities. However, a home location decision at an early adult life stage can often be followed by a build up of inertia concerning future relocations. The Survey of English Housing 1999/00<sup>33</sup> indicates that amongst owner occupiers, 54% of heads of households have been in their current residence for ten years or more. The home becomes established and familiarity with the people and amenities in the local and surrounding area increases. Moving house may be considered, but changing area is less likely. Such inertia can also be detrimental in transport terms with regard to the fabric of local communities. Suppose, for example, that a young couple first locate in an area with the interests of their young children in mind - a desire for good local schools and green fields to play in. Ten years on the children are teenagers and are no longer interested in green fields, but want to go to the nearby town. The parents want to go out for the evening more than when the children were younger. Unfortunately, the area where they chose to live originally is no longer servicing their needs as they have moved to a different life stage. The solution for many people in this situation would be to rely more

## Demographic Land Use Design



## Horses for Courses



and more on their car and increase their spatial range to take part in the activities they are now interested in.

69. A proposition was made within the Network that demographic land use design be considered. The notion was that areas might be developed to cater for particular life stages with dwelling units, amenities and other services all designed and provided accordingly. Hence, for example, plans could be devised for a school town with all services provided for young families. It is presumed that people would relocate their homes to areas corresponding to their current life stage. In so doing they would be able to satisfy a significant proportion of their activity needs and desires in close proximity to their homes. Not only could the length and number of motorised journeys be reduced, but with other compatible households in the same life stage living around them, a greater sense of local community and cohesion could result.

70. However, some scepticism was expressed over this concept in terms of its practicalities and the assumption that households could be readily assigned to homogeneous life stage groupings. Localising the spatial range of activities was also considered a problem in many cases where employment opportunities would not be available locally in spite of other household requirements being met in the area. There was also a sense that such land use design would 'destroy the mix' and make for a very boring society. Yet some of these concerns relate to the present day situation and might be allayed if land use design were allowed to change as proposed. Indeed it was recognised that to some degree examples of matches between life stages and areas already exist today, although not perhaps to the extent contemplated. Eastbourne on the South Coast is certainly branded as an area for those in the retired life stage while many city centres are seeing a strong grouping of affluent and usually childless professionals. People do relocate as their circumstances change and the inertia to do so may not be as great as illustrated above. Nevertheless, the Network felt that in many cases people are slow to recognise the increased incompatibility between their changing circumstances and the location and type of dwelling unit they occupy.

71. The issue of housing supply and demand is touched upon later in this section, but as an extension of the previous discussion the Network was concerned that housing supply is being inefficiently used and is mis-matched with demand. The situation arises where those households in most need of large dwelling units (e.g. families with young children) are least able to afford such accommodation, whilst those households with little need for large dwelling units (e.g. DINKY (Double Income No Kids Yet)) are best placed to afford and hence occupy such dwellings. (According to the Survey of

English Housing 1999/00 only 2% of all households are overcrowded while 34% of all households are under occupied<sup>34</sup>). Added to this there are situations where, in terms of location, households in a particular life stage are not only incompatible with their area of location, but are also preventing the availability of housing supply in that area for others, especially those households which are associated with the particular life stage well served by that area. For example, residences surrounding a school should, arguably, be available for young families to occupy and not remain occupied by households who, whilst once having had young children, now no longer do so. The notion of 'horses for courses' was advocated with regard to housing supply and demand (i.e. seeking a more appropriate allocation of housing supply to demand). This could both reduce the pressure for large increases in housing supply and could improve the efficiency of the usage of existing supply.

72. The Network was aware that such a notion might easily be construed as being naive. In reality the distribution of housing supply is subject to market forces and the means to pay. This is particularly the case in the private sector of the housing market. The Table<sup>35</sup> below shows the composition of housing stock in England (from 1981 to 1998 the population of England grew by 5.7% to 49.5 million whilst from 1979 to 2000 the number of dwellings grew by 19.3%). It is apparent that the proportion of housing stock which is open to influence by local authorities has decreased substantially since 1979.

Stock type	1938	March 1979	March 2000*
All tenures: number of dwellings	10.6m	17.6m	21.0m
Owner-occupied	32%	56%	68%
Privately rented	57%	13%	12%
Local authority rented	11%	29%	14%
Registered social landlord (RSL) rented	n/a	2%	6%

\*provisional



73. Economic instruments might have a part to play in promoting 'horses for courses' in the owner-occupied sector. Council Tax could be reformulated to penalise properties which have low occupancy to size ratios or which contain households in life stages incompatible with the life stage(s) principally served by the property location. However, Government is likely to be particularly wary of tampering with this area of taxation in view of the hostile reception given to the Poll Tax<sup>36</sup> put forward by a previous administration. Economic instruments serve an important role in influencing, but not dictating, choice. Nevertheless, this can be a subtle distinction

## Catchment Areas

in terms of public opinion. People seldom consider the wider social implications of their household location and property size. Their interests are closer to home, for example, a large property may be seen by its owner-occupier as a worthwhile form of investment for the future and something to hold onto. The 'horses for courses' proposition might best be taken forward through approaches which persuade householders that it is in their best interests to relocate and which make it easy for them to do so.

74. The availability and affordability of car use introduces a complacency with regard to the relative location of the home to the various activity centres required to serve a household. Increasing journey lengths to participate in activities is an easier and more desirable option for the household than relocating the household or compromising on the activity centres used because they are located further afield. People need to be more strongly directed if they are to act in a more socially responsible manner in terms of the relative location of the home to activity centres used and hence the journey distances involved and the amount of motorised travel.

75. The Network considered the extent to which catchment area policies might play a part in delivering 'horses for courses' in housing. There are examples of such policies being adopted by employers (local authorities, universities) where they have a requirement for staff to live within a certain distance of their workplace. However, employers are generally more interested in the quality and productivity of their staff than the length of their commute and in many cases only employ staff on a short term basis, making catchment policies unsuitable for the more transient element of their workforce.

76. Catchment policies for healthcare already exist whereby to register with a GP requires a person to live within a given post code area. Schools have their own catchment areas, but at present it would seem that such policies are too relaxed, are not enforced or are sometimes impractical. Indeed, the freedom of choice allowed within education policy means that parents have the right to specify which school their children attend. Schools are often keen to take children from outside their catchment area provided they can meet their obligations to children entitled to places within the catchment area.

77. More stringent catchment area policies have the potential to promote localised activity patterns, reduce the length and possibly also the number of car journeys. All major employers might be required to introduce and enforce a requirement for staff to live within, for example, five miles of the workplace. A less punitive and potentially more workable approach might be to set targets for

average commute distance rather than a strict blanket limit. A financial incentive could be offered, such as a reduction in business rates for those companies whose employees meet these targets. However, there are some obvious problems with this approach. It may be impossible for a couple, where both partners are working, to each find a suitable employer within an acceptable range from their chosen home location. Given the current factors controlling the housing market, clustering of very expensive property would occur around successful employers and schools, potentially leading to increased polarisation and relative deprivation in other areas.

78. An alternative to spatially based catchment area policies would be tradable weekly travel distance allowances whereby a household would have, for example, an allowed weekly allocation of travel distance for commuting. Flexibility would be ensured as households could buy or sell allowances according to their needs. If individuals sought by employers were unable or unwilling to move near to the employer then homeworking or the use of telecottages (as considered in the Network's first report 'Society and Lifestyles'<sup>37</sup>) might be more widely practiced to remain within the distance allowance. Clearly certain activities would be more amenable than others to having their travel distance allowances enforced.

## Co-housing

79. The Network believes that co-housing has a part to play in future living arrangements. Co-housing is a community in which the inhabitants have some private space whilst sharing some communal resources. Existing co-housing projects typically involve some communal spaces such as kitchens, dining or living rooms within a shared building or group of buildings. In addition there are private spaces (bedrooms, bathrooms, etc.) for individual households. There is the potential for co-housers to participate in car-sharing schemes. Through developing a greater sense of community within a co-housing development there is the potential to reduce the spatial range that people need to satisfy their activity (and notably leisure) requirements. Examples of recently developed co-housing projects include the Stroud development in Gloucestershire and the Project Gebers development in Skondal, Sweden.<sup>38</sup>

80. Co-housing has great potential for both adoption and success amongst the considerable proportion of the young adult population for whom student living had already provided them with such an experience and who might be more inclined to appreciate the positive attributes of this lifestyle. The models applied could vary between the intimacy of the shared student house or the relative privacy of the university hall of residence. Co-housing might offer the solution to affordable housing for young people in areas where they would otherwise be unable to afford to live and work. One could imagine the provision of young professionals' co-housing





tower blocks in London with certain stipulations concerning eligibility of becoming an occupant. This would attract a pool of skilled staff into the city and for the individuals concerned would provide a desirable form of dwelling. (The Government's current plan to deliver an influx of key workers into high price, high demand areas is in the form of its Starter Home Initiative.<sup>39</sup>)

81. In the face of increasing affluence, globalisation and mobility, co-housing has great potential for success. Certain sections of society will be spending less time in their homes and instead pursuing a greater range of activities away from the home. Less need for space and less of a wish to look after a garden or cook for oneself lends itself perfectly to co-housing. The Network believes that the key to successful co-housing is the bringing together of like-minded people with common interests. Without this, such developments would become little more than blocks of self-contained flats in terms of social interaction and consequences for activity patterns and transport. Experience shows that the appeal of co-housing extends beyond the young adult population. It is striking that forms of co-housing have been evidenced in Britain for decades but have been given little consideration in terms of providing models for future developments. For example, sheltered housing developments for the elderly have become an established, popular form of co-housing and military bases provide highly organised accommodation for service personnel and their families.

## Second Homes

82. According to the Survey of English Housing, there were about 248,000 second and holiday homes in 1998/99, equating to 1.2% of the total number of dwellings. The Network expressed some concern that, whilst this was a small proportion of total housing stock, it was a significant proportion particularly in light of the need for new housing and the land take implications of building new stock. Views on whether ownership of second homes should be discouraged or penalised were mixed. From a land-use perspective second homes might be seen to constitute an inefficient use of housing stock and land. However, from a transport perspective the use of second homes as a means to reduce weekday commuting appears, at least in the short term, to be beneficial. An example was given of someone living in Bath and working in South Wales who considered it worthwhile in terms of saved commuting time to buy a second home in South Wales to live in during the week. What is not clear is whether, in this example, in the absence of the second home the individual would have sustained a daily commute from Bath to South Wales, or would have changed job or home location.

83. From a community perspective, the notion of second homes, conjures up an image of urban areas being deserted at weekends as commuters leave their main homes to enjoy their second home in



## Challenging 'Predict and Provide'

the country and conversely rural areas being partially deserted during the week. Given the current level of second home ownership such adverse impacts are unlikely to be substantial, unless a concentration of two-home owners were to occur in an area. However, such concerns might become valid in the future if ownership of second homes is permitted to increase unchecked with only means to pay as a limiting factor. (Second homes have typically been subject to a 50% discount on Council Tax but the Government's Rural White Paper now heralds the taxing of second homes in England at the full Council Tax rate with local authorities permitted to use the revenues to alleviate local housing shortage<sup>40</sup>.)

84. The Network's first report ('Society and Lifestyles'<sup>41</sup>) considered the changing structure of households and the increasing prevalence of single person households. There is an anticipated need for between 4.4 and 5.5 million new homes by 2015<sup>42</sup> and 80% of this demand is seen to be due to single person households. At present, Government requires Regional Planning Bodies to forecast future demand for housing in their region at least once every five years and to ensure that additional land is made available to enable that demand to be met. This is labelled as a policy of 'plan, monitor and manage'. Given the collapse of predict and provide for transport supply and demand, the existence of an apparently similar philosophy for housing invites parallels to be drawn and the Network debated this approach to housing supply. However, the distinction was made that housing is a need whilst travel is a derived demand and that managing housing demand was very different to managing transport demand.

85. The viewpoint was put forward that capping housing stock would force society collectively to rethink how it lives and travels. This may be uncomfortable in the short term (and raise issues of equity), but beneficial in the longer term. A short term implication of this proposition is that unhappy couples would have to stay together because of housing scarcity. A long term implication though is that young people would stay at home for longer and consider decisions about marriage and cohabitation more critically with a greater prospect of enduring relationships.

86. The proposition to cap housing supply is not without its problems. Immediate concerns were raised regarding the reduction in choice and the inflation of house prices that would occur with pressures placed on those on the lowest income in the owner-occupier sector of the housing market. Addressing such problems might best be achieved through a substantial increase in local authority housing where the cost of occupancy would not be subject to the pressures of market forces. However, the Government explicitly supports home ownership - '*a framework where*

*owners can afford the commitments of ownership in the long term*<sup>43</sup>. Hence such a means of addressing this problem appears unlikely for the foreseeable future.

87. The preceding proposition of a slow down or halt in the provision of new housing stock prompted a realisation that the Network might be straying beyond its remit of assessing transport's future into using planning as a tool for social engineering. However, it should be recognised that planning has always been a means for ensuring that the needs of the community are met and are not threatened through development. It has always been involved in developing communities, providing social facilities and in providing mixes of types of people and affordable housing.

## Urban Housing Stock



88. It was suggested that, in the UK, existing housing stock is not well managed and more use of existing space could be made. For example, until recently it was not possible to obtain a mortgage for a flat above a shop, resulting in large numbers of properties remaining empty. The business of regenerating land (for housing) in the UK is also in its infancy. There are many brownfield sites vacant, but until recently the availability and location of brownfield sites in urban areas was not known at a county, regional or national level. The National Land Use Database<sup>44</sup> has provided a mechanism of monitoring and controlling development.

89. Much of the urban housing stock in Britain is of poor quality and in need of renovation or demolition. This is a great opportunity as it affords the chance of regenerating large amounts of urban land, but the owner-occupier status of most of the properties (which are often buildings such as back-to-back terraces that need agreement from many parties to take action) makes it difficult to bring such regeneration about and most developers therefore prefer to build on greenfield sites. The targets set for regeneration of brownfield sites are laudable, but the uncomfortable truth is that many of the sites are still occupied. A typical case example is Armley, Leeds where a large number of Victorian terraced houses were contaminated by dust from an asbestos factory. Given the poor quality of the housing and the serious nature of the pollution, the best option would be mass demolition followed by a clean up and regeneration. If the houses were rented, it is highly likely that this would already have happened. However, the owner-occupied nature of the housing makes progress very difficult, especially since many of the owners are sitting on negative equity with no obvious escape route after house prices collapsed when the problem was discovered.

## Freedom of Choice

90. A fundamental determinant of how we go about shaping the future of where we live is the extent to which the right to freedom

of choice is maintained. If freedom of choice is allowed to prevail unfettered (limited only by means to pay) then little opportunity exists for housing policies to be introduced that can significantly distort market forces to change where we live in a way that impacts positively on transport demand. It might be argued that some constraints on freedom of choice should be imposed for the common good. Upholding freedom of choice might be personally beneficial to those who can afford the choices available, but in turn this might erode the degree of choice available to those unable to pay. In other words promoting freedom of choice might also promote greater inequity. The government has the opportunity to dictate how much freedom we have in deciding where to live, but clearly it would be an unpopular move given how dearly we hold freedom of choice (whether we are in a position to exercise it or not).

91. One Network member made the following rather gloomy observation about attempts to influence transport choices: *'we all drive our cars, the vast majority of us do, in spite of economic instruments, sticks, even the carrots of investment in public transport but we doggedly stick to things because that's our right and what we like best'*. Such an observation can be countered by the contention that choice has not been significantly influenced in transport because the disparity between the car and its alternatives is too great to present the car user (as yet) with real choice. The situation concerning the choice of where to live may not be so disheartening and in many cases it may be possible, even in the absence of some of the seemingly draconian measures entertained above, to persuade householders that it is advantageous both to themselves and society as a whole to review their choice of residential location.

## Nationalise Estate Agents

92. An important figure in the process of residential relocation is the estate agent who represents a less than popular figure and is usually perceived as an expensive middle person (alongside the solicitor who profits from the obligatory legal requirements of home sale or purchase). The cost, time and stress associated with house buying can discourage higher rates of residential relocation. As a consequence householders are less inclined to improve their accessibility and reduce or limit their mobility as their lifestyles and activity patterns change. This is one of the main reasons why those in the rental sector to often move home more frequently than homeowners.



93. A proposition was made to nationalise estate agents in England and Wales. In contrast to the financially driven approach of private estate agents today it would provide an opportunity to counsel people moving home on the merits of areas and properties being considered in terms of accessibility and mobility. Data could be

collected associated with every home move to enable monitoring and understanding of the dynamic patterns of residential location and changes in patterns of accessibility and mobility. In turn, policies and practices to influence house prices and relocation decisions could be targeted to reduce mobility. Such data, coupled with the availability of extensive local data on amenities and transport services, could enable Government to issue each relocating household with a personalised advisory pack, recommending how to minimise mobility by targeting amenities and activity centres within the residential catchment area. The proposition is not to advocate a draconian system of telling people where to live, but ensuring house movers are in full possession of the facts.

94. There was concern that nationalising estate agents was too extreme a step. Whilst greater regulation of estate agents would offer a more viable approach it was suggested that regulation would be more open to abuse. There was broad agreement that better use should be made of the estate agent's role, particularly in relation to education and information provision, in residential relocation.

95. Discussion of the role of estate agents highlighted the obstacles to residential relocation that can exist and serve to stifle the dynamics of residential relocation. Obstacles include:

- ◆ stamp duty;
- ◆ solicitor's fees;
- ◆ chains;
- ◆ survey and local search uncertainty;
- ◆ untrustworthy estate agents, surveyors and solicitors;
- ◆ no legislation (in England) which prevents untrustworthy behaviour such as gazumping;
- ◆ volatile interest rates; and
- ◆ a complex range of mortgage products.

96. Guardian Unlimited Money<sup>45</sup> estimates the total cost of selling a £100,000 property to be £3,150 and the cost of buying a £100,000 property to be £2,550, making the total cost of a like for like relocation equal to over 5% of the property value concerned.

97. Various suggestions were made to improve the ease and reduce the cost of moving house. The laws for buying and selling estates for personal use could be simplified. A Government approved simple contract form with wording that can be understood without legal advice could be issued and a public forum established where buy/sell offers can be posted for free (potentially causing the immediate extinction of estate agents). Indeed, Internet-based estate agent services are already emerging which could ultimately spell the

## Improve the Ease of Relocation



demise of the traditional estate agent's position. For example, YES Property<sup>46</sup> offers its customers local, national and international promotion of their properties. Due to massively reduced overheads only 0.5% commission is charged in comparison to high street estate agents who, in England, typically charge 2-3%. Another web site, Primelocation.com<sup>47</sup>, provides viewing of '*every property from the country's leading estate agents in one place*'. This site also seeks to make the whole property transaction process easier. For example, it provides a step-by-step guide to moving, links to its partner companies and can email house-hunters when a suitable property becomes available. Network members suggested that Government might also sell its own mortgages, with low interest rates, targeted solely at sustainable residential locations.

98. The Government has already set out steps to tackle some of the problems outlined above. It has proposed legislation to require sellers to prepare a seller's information pack before their homes are marketed<sup>48</sup>. The seller's pack will include a mid-level survey. Such measures are intended to increase certainty, reduce delay and reduce the abortive costs that can be incurred by buyers. The Network supports the Government's intentions in this regard, but considered that more could be done to outlaw certain practices that can make home buying and selling a fraught and unattractive process. The classic example is that of gazumping, when the seller accepts a higher offer from another buyer after your offer has been accepted.

## A Role for Information

99. What emerges from the preceding commentary in this section is that choice is central to the issue of where we live, alongside the ease with which residential relocation can take place. People's choices of where and when to relocate can have profound impacts on the subsequent requirements of individual households for travel. Government policy that seeks to encourage or even force people into making choices that they would otherwise not have opted for are likely to be met with strong disapproval. This is not to say that such approaches should be disregarded - there may be a need for Government intervention if market forces alone prove to encourage increasingly unsustainable choices of where to live. Nevertheless, opportunities exist to improve the decisions people make in a way that both improves the outcome for them personally as well as delivering benefits to society as a whole. At the heart of this notion is the presupposition that at present individuals are making incomplete/ill-informed decisions. The Network concluded that through making better use of the role of information it would be possible in future to achieve more sustainable (in transport terms) patterns of residential location and relocation over time, albeit that on its own it is a mechanism not likely to achieve profound change.

# A VISION: THE INFORMED HOUSEHOLDER



100. The Householder - "It's six months since Jane and I moved now. I didn't think we'd ever leave our four bedroom semi in Surbiton - we'd been there for nearly twenty years and seen our three sons grow from toddlers into family men themselves. I heard yesterday that our fourth grandchild has just arrived - Jane is thrilled. I'm not one for change and I think the two of us would still be rattling around in that big old house if it hadn't been for the new Homestead Direct service. I suppose back in 2010 we would have called this type of thing Big Brother, but these days people are no longer bothered by the monolithic national databases that chart all aspects of our lives. Anyway, it's not as though we take much notice of all the monitoring that goes on. We certainly seem to benefit from the results. Unlike the junk mail we used to see so much of, the 'Direct' services that the Government has developed in recent decades all seem to understand our needs and help to make life that much better.

101. We got our interactive e-Pack from Homestead Direct a few months after our youngest son, Adam, finally left home to move in with his girlfriend. The e-Pack summarised its understanding of our present situation and highlighted how aspects of our lives had changed. It was a real surprise to see how much time we spent travelling and how much we relied on the second car because of the dispersed range of locations we visited each week. We completed a short virtual interview with the e-Pack to provide more precise

details on our current circumstances. Homestead Direct then generated several alternative scenarios for us, highlighting the changes from our current situation and the benefits we could enjoy. We saw the scenario for us immediately. Having told Homestead Direct what specific requirements we would have in moving house the e-Pack listed about a dozen suitable properties and after a virtual tour of each we fell in love with the house we now occupy. It's a two bedroom terraced cottage which is a mile from the local Parkway station. Jane had been anxious about not having our second car for visiting the grandchildren, but she now loves the fun of rail journeys to visit them. They each live in a different part of the UK so using the train makes it much less stressful than travelling by car. As for me, I still drive to work, but it's no longer the 70 minute commute I used to endure and I also have the benefit of being only a bus ride away from my local tennis club - I used to have to drive ten miles to get there and always felt peeved that I couldn't enjoy a couple of pints after a match. Some of our friends thought we were mad to leave our old house and the status that seemed to go with it, but Homestead Direct really opened up our eyes to what we had been missing when we were in the rat race."

102. The Local Authority - "The Government is certainly getting to grips with the housing issue now. Its legislation requiring householders to provide information relating to a house move in terms of their reasons, rationale and priorities, as well as factual details concerning a move, has certainly paid off. We've got national data for the last ten years now which has been a real eye opener in understanding the dynamics of residential relocation. Of course the newly launched Homestead Direct service will make this legal requirement a more pleasant experience to deal with for the public. The service has resulted from huge research and development investment to analyse the national database and develop a system that can encourage people to move home as their life stages change and to make it easy for them to do so.

103. The national GIS facility now includes housing information allowing us to see in detail the nature and distribution of housing stock within our area and how it is being used. It's taking some of the guess work out of our land use planning, such as the sometimes inaccurate Public Transport Accessibility Level (PTAL)<sup>49</sup> exercises carried out by many local authorities some years ago. In particular we are much better placed to make effective decisions concerning any provision of new housing stock, both in terms of its type and location. To some extent, provision is geared towards addressing the demand statistics that are fed back to us from Homestead Direct. However, we are also able to use development decisions to more positively influence urban interaction within our authority boundary. What's more, we are now permitted to use hypothecated



funds from the new Space/Occupancy Ratio Tax (SORT) to subsidise house purchases where we consider that to do so will achieve a more compatible match of housing stock with household type.

104. We've come a long way too since the early days of company travel plans. All employers with over 20 staff are now legally required to counsel new staff on relocation decisions. In effect, they become middle men for Homestead Direct with the benefits of adding their more detailed local and regional knowledge to what the service has to offer.

105. Our colleagues in the Transport Section are certainly inspired by the figures coming back from Homestead Direct on travel. In its first two years of operation the service has facilitated over 2000 house moves into or within our authority area. In 14% of these cases household car ownership has been reduced. There are also hints now of a downturn in traffic levels on our major roads."



# 3 Economic Push and Pull

## Introduction

106. This section presents the Network's consideration of economic aspects of land use planning and their influence on transport. Measures of different kinds are examined with education considered as an important theme. The section concludes with a vision of how the key ideas from the Network discussion might be used to provide a different playing field for tomorrow's decision-makers.

107. Economics can be defined as the "study of how society resolves the problem of scarcity".<sup>50</sup> The choices made by individuals, firms, Government and other organisations determine how resources are allocated. The price of land, availability of labour, costs of raw materials and the availability of transport networks are all factors that influence company location. Employment opportunities, wages, the cost of living and the availability of services and leisure facilities form the basis of individual's choices of where to work and in what industry. These are neither exhaustive lists of decision-making criteria nor of the decisions we face. However, the lists are clearly illustrative of the importance that land use planning could have in shaping these decisions, decisions that ultimately determine our travel patterns.

## Efficiency



108. The UK suffers from recurrent congestion due to regularly repeated and highly concentrated patterns of travel during certain periods of the day. Journeys to work and journeys to school have become the focus of a great deal of Government policy over recent years. The combination of these two types of journeys during the morning and evening peak periods creates significant congestion. Delays, accidents and pollution are experienced by business, individual travellers and local non-travellers alike.



109. How can we best go about controlling congestion and promoting efficient use of our transport networks? Fiscal measures have been employed to a greater degree in recent years with limited success. The fuel tax escalator from 1992 to 1999 attempted to raise the price of motoring, encourage more fuel efficient vehicles and less travel. Whilst some of these impacts have been observed<sup>51</sup> the policy has not been perceived by the public as an environmental measure and instead has been widely seen as a means of raising general government revenue, a fact now endorsed by senior politicians who have stated that high fuel taxes are a necessary price to pay for public services. One of the longer-term potential impacts of increased fuel tax is to encourage people to live closer to work. However, as people change jobs more frequently than they change

houses, it is a difficult decision to make, especially given the lack of long-term commitment to future policy in this area.

110. The Network broadly welcomes the sentiment of encouraging people either to move closer to their place of work or, alternatively, to abandon a long commute and change jobs. The Network discussed a number of alternative means of encouraging people to live closer to their place of work.

## Location



111. A popular current solution to the travel to work and travel to school problems is to encourage the take up of Travel Plans by employers and schools. These are intended to reduce the amount of single occupancy vehicle journeys to work and unnecessary trips to drop children off at school. Local authorities are increasingly using Travel Plans as a prerequisite for the granting of planning permission. Travel Plans do not change the pattern of travel involved (the origin-destination matrix) and a transport solution must still be found for this travel pattern. The Network saw opportunities to take this policy further.

112. One approach is to set mobility limits where individuals or family units are given a certain mileage allowance for the year from which they have to 'buy' their work travel. Couples could arrange to live near one of their places of work with the other having a long commute. Credits could be traded by those who need to use them less to those that need them more. This approach was felt to be an extreme solution with a number of drawbacks, not least the libertarian, social and political difficulties that such a scheme might present. The system would also be costly to develop and monitor. However, if other measures cannot enable us to meet our demand for transport in a sustainable way, such draconian measures and infringements on our civil liberties might become more palatable.



113. The first steps towards persuading people not to live far from the place where they work and the facilities they use are education and awareness. It is felt that the rationale behind current policy thinking is not presented to the populace in the right places or in the right way and this is key to the successful introduction of new schemes. Education could be combined with fiscal incentives. In putting the message across about living closer to work, the Network suggests that new 'Golden Hello' payments or tax relief schemes could be set up, dependent on the distance you live from work and the mode of transport you use. Under such a scheme, properties closer to work could become more attractive on a rent or buy basis without making properties further away more costly. This would be particularly appropriate in larger urban areas where there is a greater range of employment opportunities and locations. This might also

help to engender the community spirit that factory communities tend to have and in turn bolster other shared community initiatives.

## Time and Effort

114. The Network discussed the role of the following factors in determining people's travel choices:

- ◆ available transport modes;
- ◆ money;
- ◆ time; and
- ◆ energy.

115. The time available to human beings and the physical energy that they have to undertake travel place real limitations on physical movement. Whilst it may seem surprising that 25% of all trips made by car are under 2 miles, walking 4 miles on a round trip will take over one hour, which is more than the 55 minutes average daily travel time for a UK citizen<sup>52</sup>. This is economics at the most fundamental level - allocation of limited resources, in this case, time.



116. We should consider what will happen to the time freed up by shorter journeys to work. If people are currently willing to give up that time to sit in traffic jams, it is possible, even likely that they would be willing to use that time to access leisure facilities outside of work. Whilst the objective of a transport planner would be to encourage these trips to be to local facilities and to be undertaken on foot or by bike, an alternative scenario must be considered where increased leisure travel is undertaken by other modes. Public transport works well in a hub and spoke formation, suited to large concentrated flows of passengers moving to urban centres. Patterns of leisure travel tend to be more varied and harder to serve for public transport than commuting trips, although government planning policy is seeking to redirect leisure and retail land uses back into town centres, representing a move to address this situation<sup>53</sup>. It is not clear whether reducing travel to work will create a different problem less capable of being solved by public transport or if increased leisure trips that result will tend to make more efficient use of the transport network by being more flexible in time of travel and destination.

## The London Thing

117. It seems amazing that the London region continues to attract so much business when land prices are so high compared to the rest of the country. The obvious question is why have more businesses not left the capital for areas with cheaper land and more abundant labour? Will there be a point where there is a drain of lower skilled, lower paid workers from London when the relative cost of living becomes too much to bear? There is evidence that this has already



begun with concern over housing key workers in London and the South East.

118. The Network could not answer these questions but the discussion highlighted a number of issues. Part of the solution to the question of London's continued economic growth is transport. Transport links have been expanded along a number of spokes into London (e.g. Thames Valley) and the provision of motorways and rail links mean that people have traded reduced house prices in distant suburbs and towns with long commutes. Commuting across London can often take longer than commuting from outside London. Transport seems to be cheap enough and good enough to override what would appear to be grounds for businesses to relocate. However, sooner or later, the high turnover of staff in key worker and other positions could undermine the economy of a whole region. London's travel demand tentacles stretch for hundreds of miles and this could increase further with more investment in London's transport connections.



119. Clearly London has an important global image. In a global economy where identity and marketing are important factors, where you are says a lot about who you are. This is the well-worn cliché of: 'Location, location, location!'. The Network was divided in its opinion on whether the huge concentration of people and resources was a good thing or if we would be better off with more balanced regional centres. With congestion currently costing Surrey an estimated £500M per year<sup>54</sup> the figures would seem to suggest that bringing investment outside of London and the South East will be a more effective use of our transport system. Furthermore, the growth of the Internet and e-communication could mean that the address at the top of the company letterhead could diminish in importance, as organisations realise there is no need to remain in the most prestigious but congested locations.

120. If growth in the UK continues to be focussed on London and the South East then its high volume, public transport systems would have to be expanded outwards. This would place even greater pressure on land use and land prices. The London conurbation is so large and complex that it is not certain that the investment would deliver the same benefits that it might do in shaping other cities.



121. The cost of owning and renting relative to income levels forms an important element of decisions about where to live relative to work and other facilities. From a transport viewpoint, the relatively lower housing costs in places distant from the work location are creating longer commutes. Why, for example, should so many people have to travel from Reading to London every day to work?

The UK's transport networks are subject to severe congestion in certain areas at certain times of the day. The imbalance of home and work location is a big contributor to this. Is there any way we can encourage new development to occur in areas with less congested transport networks where they will receive a better quality of transport service?

## Regions

122. A solution to tackling regional economic imbalance is for each of the regions within the UK to identify current transport loadings using nationally agreed criteria. Government subsidy could then be targeted to support development in areas of economic need with sufficiently low transportation loadings. Other areas would have to forego expansion until they delivered schemes to reduce the transport loading for their area. As this could potentially be unpopular with local authorities, it should be packaged as a grants scheme and only be available to certain areas, thus not prohibiting development in existing hot spots, but instead encouraging development outside of these areas. This is a solution that addresses 'sustainable economic growth' head on, an ambition often mentioned but usually without any real substance.

123. A possible method of applying this solution is to set interest rates at different levels in each region, making areas with under-utilised transport capacity more attractive. Whether this would be the best solution, what side effects such a policy might have and a clearer economic rationale for it need to be investigated further. Indeed, concern was expressed regarding the acceptability of such regional variation in the context of a global financial market. Experience has shown that global companies have located plants in special development areas (with reduced taxation incentives), only to close them down (after a period of grace) when the incentives are phased out and re-open in new special development areas.

124. Whilst most countries have the same distribution of cities in terms of population and economic activity as the UK (one large capital, many small cities and towns), Germany is as an example of a country with greater regional balance. The Network supported the idea of increasing the importance of regional centres such as Leeds, Newcastle, Birmingham, Manchester, Belfast and Bristol. A more regional focus of facilities and development could help to take economic heat from London. The comparison with Germany is apposite in demonstrating the links between economic and political factors in achieving greater regional balance. Whilst the German political model is federal with power devolved to the regions, in England the regions have no political independence from National Government. By contrast Scotland and Wales have much greater political freedom to pursue their own agendas. Political devolution



in England is therefore likely to be the necessary prerequisite for a greater degree of economic balance across the regions.



125. As a step towards political devolution, more Government departmental headquarters could be moved away from London to the regions, following the example of the move of the NHS Management Executive to Leeds. The support services for these arms of Government would follow creating a focus for growth in the new area. This policy could be inevitable as Government fails to keep pace with the wages being offered by the private sector for all levels of its staff. A further measure that could assist regional devolution is to restrain growth of London air capacity and to increase capacity at regional airports.

## Investment

126. Regeneration projects in urban areas, selected through the development planning process, allow standards to be relaxed and create extremely flexible land use policies to stimulate development and investment. London Docklands, the Greenwich peninsula and Trafford Park are a few examples where radical changes have occurred over recent years. One of the key elements in each of these areas is the provision of high quality public transport access. The Network considered investment in Light Rail Transit (LRT) as being able to create a focus for development.



127. One of the key issues with investing in expensive LRT schemes is having a critical mass of users to make the scheme economically viable. In Manchester<sup>55</sup> ground for future routes has been set aside and development encouraged around these routes. Investment in LRT systems in regional centres in the UK is a priority for investment in the Government's Ten Year Plan. Whilst it will take many years for large networks to be developed covering several city corridors in these regional centres, they offer the prospect of a permanent and higher quality attraction for development. This reminds us that transport and land use interact in a two-way process where our long-term aim must be to invest in transport schemes that will attract development and be able to service that development in an efficient and sustainable manner.

## Incentives to Change

128. Little compelling evidence has been put forward about how much changes to land use will affect transport demand over the coming years. It has been said that 90% of our urban fabric will still be there in 30 years time<sup>56</sup> although a 15% increase of housing stock will be achieved by the building of 3.2 million homes by 2021<sup>57</sup>. Severe congestion problems affect many areas at peak periods, providing serious concern for many economic development departments in local authorities, not about attracting inward investment, but about keeping it. How can we accelerate



changes in land use to try and alleviate the problem of unequally distributed transport loadings at a local level?

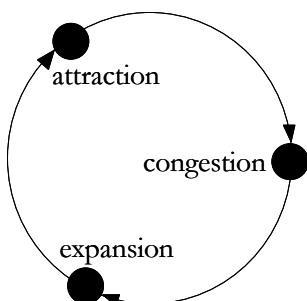
129. The Network sees a need to develop more strategic combined land use and taxation/subsidy policies to encourage a shift of development to more sustainable locations. If the right market conditions can be generated, business will respond by moving to more sustainable locations.



## Urban Economic Zones

130. One solution is to restructure business land use taxation. However, given that businesses are unable to respond to changes in land taxation immediately, the restructuring of the taxation scheme must be set out some years in advance of its introduction. The policy should be introduced alongside new transport infrastructure developments such as LRT discussed above.

131. In the US 'Urban Economic Zones' (UEZs) have been established in areas needing regeneration. The UEZs allow for certain local taxes to be lower so that consumer goods are cheaper. Whilst the principal goal of UEZs is to encourage regeneration and not sustainable transport, UEZs could be restricted to the most sustainable locations. The concept could be expanded, with council tax and stamp duty relief linked to safe street design, limited parking and provision of facilities for public transport, cyclists and pedestrians.



132. Measures could also be considered to try and remove congestion from existing developments other than expanding road capacity. It might be preferable to subsidise business park owners to close industrial or commercial units to reduce pressure on the transport network in selected areas with the highest transport loadings. The owners of the units could be encouraged to relocate using the UEZ schemes above. In this way, we might break the circle of congestion, which leads to capacity creation, which attracts trips, which creates congestion.



133. A national strategy would be required for developing UEZ schemes and for overseeing the taxation and subsidy schemes proposed. UEZs would need to learn from the mistakes of the Simplified Planning Zones<sup>58</sup> of the 1980s which often neglected the needs of existing, local communities (e.g. the development undertaken in the London Docklands during the 1980s). Concerns remain about the impacts of such schemes at a macroscopic level (i.e. business moving to adjacent local authorities with more favourable schemes.) It is therefore essential that the size of the UEZ should be reflective of the population of the settlement, so that the number of jobs effectively matches the size of the population. This should be managed under the national drive to improve transport loadings.

## Flexible Facilities

134. Accessibility to a range of essential activities is an important element of current transport policy and a view elaborated on by the Network in its second report<sup>59</sup>. Measures included in the first round of Local Transport Plans for the UK recognised that many people do not have sufficient access to facilities, particularly in rural areas<sup>60</sup>. Measures were put forward to improve bus service infrastructure and frequency to provide opportunities to reach these facilities.

135. Whilst it must be recognised that people value the opportunity to travel to local and regional centres, other non-transport solutions exist to make services accessible. Rural bus services are being subsidised on top of the fuel duty rebate available to public transport. One alternative would be to switch the subsidy from the provision of public transport to the provision of a shop in a local community.

136. It was also suggested that schools should be made a focus of local enterprise. Local authorities could provide annex buildings for travelling businesses (hairdressers, garden centres, butchers) to visit on a pre-planned programme. Special facilities could be laid on to enable residents from the area of the school to access the facilities. From a transport perspective such a solution makes sense. Instead of everyone travelling to a town centre, the business comes to the community with journey lengths reduced for residents. Such centres might also provide a local community focus and would enable extra services to be planned and targeted for particular days rather than spread out over the whole week.

## Brownfield



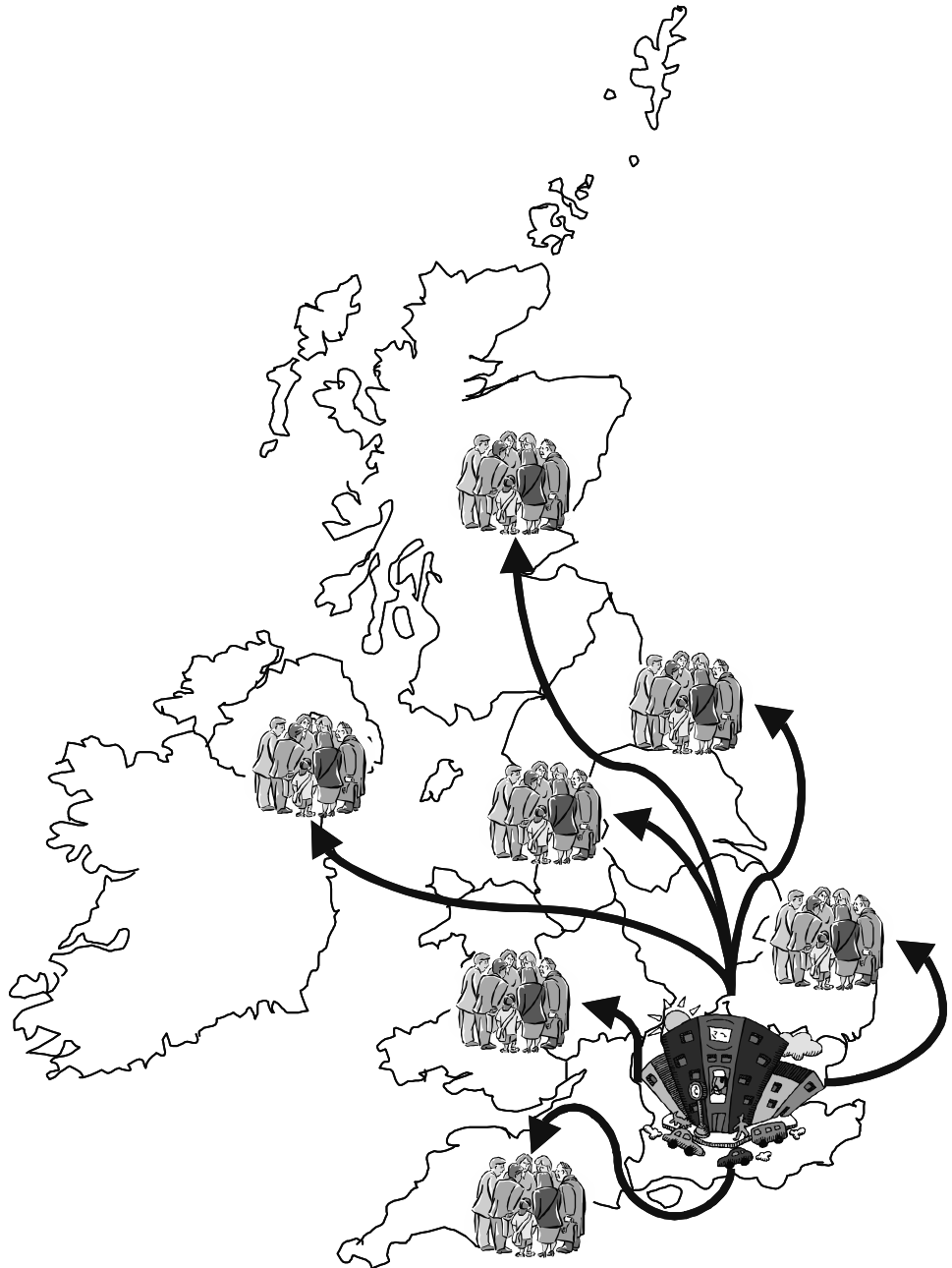
137. The importance of regenerating brownfield sites rather than developing greenfield sites has been recognised over recent years. A major problem with re-developing brownfield sites is the time that it can take. A delay can be experienced between the closure of a site and the right economic conditions and development plan being put forward to re-develop it. There can also be delays due to remediation work required.

138. In present circumstances, onus is placed on the land redeveloper to take responsibility for the demolition and clean up of the land, the costs of which are reflected in the price of the land. An alternative solution would be to impose a greenfield development tax with revenues hypothecated towards a demolition tax or savings fund to be set aside by the business owner over the lifetime of the property. In the event of a relocation of premises or closure, a fixed period of time would be allowed for new users to be found before the site would be deemed disused. The demolition tax or savings scheme would then be used to reinstate the land to greenfield conditions until a future buyer was found. The principle behind such a tax would be to make developers and companies act as

responsible custodians of the land they own and to take account of the costs of cleaning up their operations in their own production decisions in a manner comparable with the United States Environmental Protection Agency (USEPA) 'superfund' for contaminated land in the United States<sup>61</sup>.

<sup>139</sup>. Businesses should not lose out as a result of this scheme, as the land value will rise, given that the future developer will not be faced with the cost or uncertainty of demolition and decontamination of land. Indeed, such a measure could act to prevent situations where land users walk away from a polluted site and leave it unsold, as the costs of remediation are too great. The current Government CLAIRE (Contaminated Land: Applications in Real Environments)<sup>62</sup> initiative attempts to solve this issue from the other end with accelerated tax credits payable for cleaning up contaminated sites. Society could benefit from such policies in a number of ways. Disused sites are often an eyesore and a dangerous playground for children as well as contributing little that is positive to the environment.

# A VISION: LOCATION, LOCATION, RELOCATION



140. The Manager - "A new city, a new start. I am hoping the incentives we have been offered mean that we can offset the costs of moving and the loss of staff over the next 18 months or less, productivity is already up. Staff turnover at businesses inside the M25 is such that we just couldn't build up our knowledge base

where we were. Besides, most of our staff didn't even live in the London region anymore and giving people time allowances for commuting just doesn't add up. I wouldn't have minded so much if they arrived refreshed and ready to go on their reduced working week.

141. There are still so many businesses sticking to the rather passé concept that you need London to have a global image. We've left a satellite promotions office in a state-of-the-art business promotions facility round the corner from the Houses of Parliament, connected to our main operations through telecommunication links. Besides, Nottingham has a strong global identity with Robin Hood and a fantastic city centre with a number of cultural sites of interest. We've located near the middle of line 6 of their LRT system. We can access the regional airport by express shuttle every 20 minutes and the town centre by LRT every 5 minutes. Parking at our site is limited but that's the benefit of locating by an LRT line and our incentive scheme should hopefully strike the right balance of journeys to our site."

142. The Worker - "We sold our second car last week. Paying for parking outside our house, parking at work, hydrogen prices are as high as ever and we only ever used it for John's commute. That doesn't make sense anymore now the LRT system has opened on this side of the city. As well as the savings on not running a car, we also get a tax break if I take the LRT to work. When John relocates to the new business park at the end of the line, we'll really be laughing. We'll have a lot less taxiing to do as well when the kids can access the LRT line.

143. I never realised how much time and money I spent travelling to work. Everyone else did it and it never really crossed my mind not to. No one wanted to live round the corner from where they worked but I can't really remember why? That was when quality of life was judged by the colour of your dishwasher front I suppose. Mind you, we were limited by the housing we could afford. This tax break should make it easier for us to find that next house, in fact, my employer should have a list of suitable opportunities first thing tomorrow."

144. The Local Authority - "I think we'd still be arguing now about the location of the new guided busway line if we hadn't demonstrated the importance of the system to local business. We have to meet reliability targets of journey times on all modes before we can encourage further growth in our area. This is in stark contrast to Warwickshire, where they seem to get one new business commitment a week since their integrated Warwick, Coventry, Stratford tram system has been up and running. Still, whilst we

aren't attracting as much inward investment as before, we are seeing our existing businesses grow at the fastest rate for two decades. Less congestion and shorter travel to work times brought about by these taxation changes have seen a real boost in productivity and quality of life. Still, it didn't happen overnight, education aided by responsible lifestyle support initiatives, paved the way. We have a lot to be proud of."

# 4 Rural and Urban Environments

## Introduction



145. Land use planning possesses a great capacity to shape our living environment. This section will consider the ways in which land use planning (in close relationship with transport considerations) can protect and improve the quality of both our urban and rural living environments.

146. The Government's Rural White Paper<sup>63</sup> published in 2000 acknowledged the severity of the challenges facing the rural environment and the need for action to tackle them. The Countryside Agency was created as a specialist adviser to the Government on rural issues and its Chairperson serves as the 'Rural Advocate' arguing the case for rural interests at the highest levels of government. Since the White Paper the Government has created the Department of the Environment, Food and Rural Affairs<sup>64</sup>, recognising the differences that exist between town and country.

147. The Network broadly endorsed the objectives contained within the Rural White Paper although it noted there could be conflicts in trying to meet all of the objectives. Preserving rural communities and at the same time developing their economies could present difficulties. Preserving the rural environment while increasing its accessibility to visitors could also be challenging.

## New Rural Economy



148. At the heart of Government policy to ensure that the rural economy is dynamic and sustainable is an acknowledgement of the need to embrace technological innovation and diversification. Fundamental to this approach is an acceptance that virtual accessibility provided by ICT is pivotal to rural economic development. In this regard the Countryside Agency is to monitor the roll out of broadband in rural areas. ICT based business will be encouraged by Regional Development Agencies (RDAs) through strategic innovation corridors linking new economy businesses in the rural hinterland to major industrial or research centres. An Electronic Rural Portal for Farming will provide access to information and interactive advice for farmers by 2002. The Rural Enterprise Scheme will help farmers redirect their businesses into marketing quality agricultural produce, rural tourism and craft activities and create an e-commerce shopping mall for speciality and regional food businesses.

149. The Network considered housing implications of this policy. It would be beneficial to encourage people with e-business skills to live and work in rural communities, providing a larger presence of people to support local facilities.

150. *Take a village where 37 people travel into large town X every day who don't need to, let's encourage them to stay here and work. 37 people walking round the village at lunchtime rather than up the town, encouraging the use of local facilities. If rural communities haven't got local facilities now they will develop in response to demand thus reinvigorating the rural economy and society. It gives you the incentive to start up a rural business knowing you are going to have customers or for the government to make it easier for businesses to start up or keep going because the market is more likely to be there.*

151. In its first report<sup>65</sup> ('Society and Lifestyles') the Network presented a similar idea in the 'workplace to the workers' scenario which at its heart had the community office or telecottage. With location becoming increasingly irrelevant for many types of employment and a rapidly growing flexible service industry, the potential for teleworking is considerable. The use of a community office which combines ICT with a communal working environment offers great potential for stimulating rural economy and society. Rural dwellers unable to gain employment in traditional declining sectors could train for such employment. The community office could also provide a focus for the provision of facilities needed to service the local working population.

152. There was also limited support within the Network for a controversial counter strategy to tackling the problems of the rural economy and society. It was argued that providing facilities and services (including public transport provision and affordable housing) to meet the needs of rural communities was economically and politically unviable. Therefore a process of rural depopulation was the only way to ensure that residents not directly engaged in the maintenance of the rural economy could be assured of achieving a quality of life that was sustainable in the long term.

153. Maintaining and improving accessibility is an important issue for building sustainable rural communities. A range of public services (NHS Direct, Care Direct, Community Legal Services Partnerships (CLSPs), Employment Service Direct, National Grid for Learning, Transport Direct, public libraries) are scheduled to be available on-line by 2005. The Government has introduced 50% mandatory rate relief for village shops, pubs and garages offering community facilities (e.g. cash machine, cashback, community meeting room, ICT access point). Rural Post Offices are to offer universal banking, Internet, social and health services and to have networked IT capabilities by April 2001.





154. The current emphasis on delivering virtual accessibility is consistent with the Network's Transportation Requirements as listed in the Introduction. The Network recognises though that virtual accessibility is not the panacea for all woes and that physical accessibility to real destinations is both necessary and desirable. In its Rural White Paper the Government seeks to address physical accessibility through community based and flexible transport schemes such as car clubs, car-sharing, dial-a-ride, taxi and minibus schemes and by providing parishes with up to £10,000 to develop community transport solutions.

## Letsbuyit!



155. One possible solution to accessibility problems is to combine the virtues of virtual accessibility with those of flexible, community based transport following the principle pioneered by the internet based company Letsbuyit.com<sup>66</sup>. A product is offered for sale at a price similar to the recommended retail price, but lower prices are shown for which the product could be sold if enough people place an order, thus passing on the benefits of economies of scale and bulk buying. The principle could be applied to transport. If one person orders a taxi to go shopping at the local supermarket at a certain time, they pay the full cost of the taxi fare. However, if another person wanted to go, they could split the cost, providing their schedules coincide. If several people wanted to go, they could order a mini-bus and reduce the cost further. Costs could be lowered further if there were community pick-up points. Villages and towns could have their own community websites or intranets to promote such services.

156. The idea could also work in reverse, with communal delivery points such as community offices. Rather than paying £5 to have your groceries delivered to your home, supermarkets waive the charges for a weekly delivery made to a community delivery point. This is likely to extend the viable catchment areas for supermarket deliveries. Groceries could be left in secure lockers, with refrigerated compartments for cold goods.

## The Social Fabric



157. Social and economic trends are combining to radically alter the social fabric of rural communities. The sale of rural council houses and lack of housing association homes means there is little accommodation for first time buyers<sup>67</sup>. Four out of ten new households in rural areas are unable to buy a home. A survey of 60 18-year-olds in North Yorkshire found that by the age of 22 only one had achieved a level of independence while staying in a rural location. Mark Shucksmith, Professor of Land Economy at the University of Aberdeen, states that "rural areas are ruled by market forces, so the rich will live in the countryside and the poor in the urban areas. The social glue that holds rural communities together is falling apart. The original inhabitants had a balance of all

generations and these social networks are being fractured. The old will have no one to look after them and the young will be without the support of their parents."

158. The situation can be exacerbated by wealthy incomers taking positions on parish councils and protecting their version of a 'rural idyll' by preventing new development, including affordable homes built by housing associations. 80,000 affordable homes were needed in rural England between 1990 and 1995 with only 17,700 new social housing units provided between 1990 and 1997. The Rural White Paper plans for 9,000 affordable homes a year to be built in rural areas but this is not enough to prevent a continuation of the trend. Gentrification is not a wholly rural problem. Displacement caused by an influx of people with increased buying power can affect urban areas. In the cities, however, the mechanisms are in place and are more rigorously applied to provide social housing than they are in rural areas. The planning system could help to alleviate the problem by differentiating between first and second homes in the planning use classes order. This would enable rural local authorities to establish development plan policies which restrict the number of second or holiday homes.

159. The decline in rural services has been helped to be brought about by increased use of the car to access services in other places by some members of the rural community. It is those households who do not own a car who have suffered, some of whom have been forced to move into urban areas because their transport options and local facilities have been seriously eroded due to lack of use by other members of the 'community'.

160. The Network identified a potential solution to this problem. The Rural Preservation Tax imposes an additional tax on the purchase of a house in a village if the buyers are not already resident in the village or a nearby village. In addition to the purchase price of the house a one off hypothecated tax (at the rate at which income tax is paid) has to be paid. The funds raised pay for better public transport for the community. If implemented effectively the measure could deter excessive 'country to town' commuting and overcome traditional rural objections to pricing based land use policies.

161. In parallel to improved public transport provision, policies could be implemented to increase the costs of car use without fears of consequences such as social exclusion. A steady long-term rise in fuel duty could be used to dissuade people from moving to 'fuel-inefficient locations'. When aware that moving a long way from work is going to result in increasingly steep transport costs, people might think twice about it, particularly if Government points out

## **Rural Preservation Tax**

that this is the tax's intended outcome. In this way a fuel duty escalator could support the objective of reducing the need to travel, by influencing the lifestyle decisions people make which influence their travel/activity patterns in the longer term.

162. Given that inflated house prices caused by the inward migration of more affluent people is not solely a rural problem, the argument was made that a more inclusive and comprehensive approach to tackling this problem would be to look at ways of adapting the planning use classes order on a nationwide basis. This approach would recognise that the problem was a national rather than a 'town versus country' issue. Indeed, it was argued in more general terms that the problems of land use and transport were everybody's concerns and swingeing taxes on 'newcomers' could be interpreted as xenophobic.

## Access for All?



163. The Rural White Paper promises a new right of access for walkers to mountain, moor, heath, down and common land by 2005 and a national access database available on-line to inform people of opportunities available in the countryside. There is the danger that the Government's objectives "to conserve and enhance rural landscapes and the diversity and abundance of wildlife" and "to increase opportunities for people to get enjoyment from the countryside by opening up public access to mountain, moor, heath, and down and registered common land" could prove incompatible. After all, will not providing greater transport access to the countryside lead to a deterioration of the rural environment? Whilst the Rural White Paper promises increased funding for programmes, like 'Eat the View'<sup>68</sup>, which highlight the links between the products people buy and the countryside they value, the transport implications of such an 'access for all' policy are not considered.



164. The Network believes that if you enhance people's access to attractive environments they will respond accordingly. It is then necessary to charge people appropriately for that privilege and use the revenue to maintain the environment. For example, there are tourist taxes in the Lake District, which operate by adding 10% to your bill (on a voluntary basis) to be put back into environmental preservation. In terms of transport implications, the Network advocates that the best approach is to provide public transport services to the rural attraction and to regulate access using pricing criteria that take into account the mode of transport used. Arrival by bus rather than car means a lower entry price. Alternatively, access to the most desirable attractions could be restricted to public transport users, as happened with the Millennium Dome<sup>69</sup>, which was constructed without any off-street parking provision.

## Urban Land Use Efficiency



165. Two of the central aims of the Government's Urban White Paper<sup>70</sup> are to regenerate urban environments and to improve the efficiency of land use within those environments. The Network believes that legislation is required to hasten the re-use of vacant land. At present, non-domestic unoccupied property pays 50% rates after 3 months of vacancy. The problem of high land prices in many urban areas is exacerbated by developers leaving buildings empty as they wait for the 'right price' to sell. A solution is that non-domestic unoccupied property pays 110% (or more) of its rates after 3 months of vacancy with a graduated scale where there is an increase of 10% (or more) every 3/6 months, unless evidence of imminent occupancy or the property being made available for occupation at the market rate is provided. If after 3 years the owners have demonstrated no intention to make efficient use of the property then the local authority will require the owner to explore alternative uses to secure use of the land. Following a further year the local authority assumes ownership of the land and determines an appropriate use, which could include social housing, a business incubation centre or other forms of community regeneration initiatives.

## GLUEINS



166. The Network proposes that the Government Land Use Efficiency INSpectorate (GLUEINS) is launched to take responsibility of vacant property and wider issues of land use efficiency. GLUEINS inspect all non-domestic property for land use efficiency and provide an efficiency audit. They make obligatory recommendations for improvements and have powers to financially penalise those who persistently ignore advice. Positive financial incentives are given for take-up of recommendations. The efficiency audit includes company car parks and therefore provide financial incentives for Travel Plans to be taken up. All charges/reductions are enforced through the property rate payment system.

## Going Underground



167. In locations like Cambridge and London, where land is particularly expensive, the cost of constructing underground car parking is less than the value of the land itself. Developing underground car parking to free up surface land makes financial sense and makes land available between buildings for other uses than parking. The land made available could be used for homes of the employees of the adjacent office blocks or could be landscaped to deliver a more attractive urban environment.

168. Underground car parking could also have a role in residential areas. Today the main function of residential streets is as access roads for cars to be parked outside owners homes. An underground car park could be provided for each residential estate. The access roads are then no longer required and can be transformed into attractive communal areas for mutual enjoyment by residents.

Consolidating parking for residential estates improves the opportunity of subsequent progression to shared ownership of vehicles amongst residents. A community underground car park requires only one access point for vehicles, whereas parking under houses in townhouse developments requires an access point for each house. Security of the underground car parks could be achieved by users clubbing together for CCTV or security patrols: *"Arguments with your neighbours about parking outside their house would be a thing of the past. You keep the weather off your car when you're not using it. More land becomes available above ground as no-one needs car parking space."*

## Brownfield Development



169. One of the key issues regarding land use and the urban environment is the compromise between trying to get high density housing and economic development (economic regeneration), whilst enhancing the quality of life within urban environments (social regeneration). There is a need to get the right balance between housing, employment and leisure in seeking to utilise brownfield land. Clearly, a higher standard of urban design will be needed if the redevelopment of brownfield sites at higher densities is to be accepted by those living and working at these sites.

170. The use of brownfield land for new parks, playing fields and open spaces could provide a range of benefits. It could serve to decrease leisure travel by removing the need for urban dwellers to travel far to seek such environments and it could aid social inclusion by providing access to green environments for those urban dwellers less able to visit rural areas due to travel and accessibility problems. Green areas in the urban environment are also vital to maintaining biodiversity as they provide corridors for urban wildlife.

171. In developing brownfield land, as with any land, it is important not to build homes without considering the other facilities that will be required by the community that live there. The Network debated where the responsibility lies for providing these facilities. Should house builders be refused planning permission if there are insufficient local facilities (i.e. insufficient capacity in local schools to meet the increased population)? The opinion was that we should not allow housing to be built where there are no supporting facilities, but we should not be forcing developers to pay for all of these facilities.



172. In some locations there will be competing uses for land. Brownfield sites close to or in town/city centres could equally be used for retailing or office development as for housing development. There is a danger that house builders will be squeezed out of the most attractive/sustainable locations by uses which attract a higher price for the land and which are not burdened by a long shopping list of demands from the local authority. The

## High Density Living



Network believes that planners should draw up policies that stipulate permission will not be allowed for new housing unless there are sufficient local facilities or unless they will contribute to those facilities. This will prevent housing being built in unsuitable and unsustainable locations. The Mayor of London's Housing Commission<sup>71</sup> recognised this issue but approached it in a different way. It recommended that commercial developers make some provision for affordable housing (either on site or a financial contribution off-site). The problem this faces is that unless a clear correlation can be shown between the development and the additional housing, the request may prove to be unreasonable or even unlawful.

173. Living in high density flats has traditionally met with resistance in the UK. The phrase 'an Englishman's home is his castle' reflects the desire of many people to have their own detached house and garden. However, there are examples of high density living which have proved popular in larger, historic UK cities. These include Georgian and Edwardian terrace houses of 3 or 4 storeys. This shows that people do not object to high density living if the quality of the living environment is good.

174. The choice of term 'flat' is significant. In many other countries 'apartments' are seen as sophisticated dwelling choices. It is interesting to note that many housebuilders are now describing new flats as apartments in their marketing information. People often associate living in flats as being a stage in life experience to be adopted in their younger years. As a student or young professional, a flat in a city with easy access to a range of facilities is highly valued. However, aspirations change: *"I know 10 years down the line when I have children that I would like more space and a garden that they can play in and somewhere that's easy to get in and out of."*

175. The Network believes that high density living can attain an increased degree of popularity. High density developments could attract families with children if designed to include courtyards or communal gardens or located near to urban parks for children to play in: *"If there were more of those green wedges maybe we'd be more inclined to think it's not that bad a place to bring up children because you've got these safer places, the roads aren't death traps."* It will be necessary for initiatives to be taken to fund and promote developments which illustrate high density, high quality living.

176. Demographic and lifestyle changes in society could facilitate moves in this direction. With the decline of the traditional nuclear family and the growth of a range of family and non-family living arrangements, the traditional three bedroom house is poorly suited to accommodating large sections of the population. On the other

hand, other lifestyle trends such as homeworking with its need for office space may influence a significant proportion of the population to favour more spacious living arrangements.

## Climate Change



177. The Network moved on to consider an environmental issue that applies to both urban and rural situations. It has been suggested that the climate change impacts of present day actions will take 25 years to fully materialise and therefore there is a substantial period of delay between attempting to mitigate climate change and appreciating the consequences of those actions. The importance of the problem has been highlighted in recent years through flooding, its most visible and damaging expression in the British context. The problem of flooding has been of high national prominence in recent years and its impacts have been particularly acute in the winter months. The problem appears intractable with the only potential action being to patch up poorly designed and located buildings and flood defences and put in insurance claims on a regular basis. The winter of 2000-1 in Britain has been widely considered to be the worst since records began in terms of flooding.

178. A simple measure that could be taken immediately is to prohibit the use of tarmac on residential driveways. Instead, paving stones should be used which are significantly more permeable. In Berlin, it has become local law that all the rainwater must be drained locally on the site and not enter the sewage system. An even more advanced example can be found in the Netherlands, a country which is historically far more susceptible to flooding than Britain and which has suffered far greater human loss within living memory (floods in 1953 caused over 2000 deaths<sup>72</sup>). Local roads and housing estate roads are often not built using tarmac and deep wearing courses. Instead sand is used with block works on top. There is more maintenance involved but it is possible to take the surface up and relay it ten years later and in a different formation if that is desirable.

## A Venetian Vision



179. A more radical vision is to adapt to the prevailing processes.. Areas that are susceptible to flooding are permanently flooded and buildings adapted to accommodate raised water levels and water-based transport. Rowing boats, canoes or electric boats<sup>73</sup> are used for transport. The ground floor of buildings is left to the elements whilst ensuring the foundations are secure. In the novel *Angela's Ashes*<sup>74</sup> set at the end of the nineteenth century a poor Irish family lived in a house that was susceptible to flooding. In the winter they called it Italy downstairs (after Venice) and they lived upstairs. In the summer the downstairs drained of water and they went downstairs.

180. *"Britain could be awash with mini Venices providing potential tourism attractions. Take a gondolier journey through Worcester or York! Waterside apartments would also provide highly desirable residential property. Far from being bizarrely futuristic this is a return to a traditional British landscape as for centuries the fenlands of Eastern England were inhabited island communities. The only difference is that water management/engineering technology would avoid community severance and communications problems."*

## Abandon and Relocate



181. Another vision of adapting to the prevailing processes is to abandon low lying areas. This is encouraged by market forces which result in people whose properties are located on flood plains being unable to obtain insurance against flooding and finding the persistent problems of flooding intolerable. The public is informed of flooding records as a matter of course when considering residential relocation. It is therefore unwilling to buy property on a flood plain, however desirable it may be in other respects.

182. If relocation is necessary on a large scale, then it offers the prospect of acting as a means of changing attitudes to different ways of living: *"If flooding goes on every year and people are unable to get insurance for their homes and house prices start to fall, relocation might seem more acceptable. You can live here and mop up every two years and still own your car but you could move away without the car and never have to mop up again."*

## Foot and Mouth



183. Environmental crises on the scale of the flooding problems of recent years are not common in Britain. It is significant therefore that in early 2001 an environmental crisis re-emerged after a 34 year absence on a scale to rival the floods. The outbreak of foot and mouth disease across Britain has led to widespread questioning of the way in which the agricultural economy functions and is structured with potentially profound consequences for land use and the environment. Commentators have pointed to a number of factors which are to blame for the disease. One that has been highlighted is the mass transportation of livestock over great distances both nationally and internationally. This provides telling evidence for the need to identify sustainable alternative approaches to land use and transport.

184. The Network believes steps need to be taken to establish regional markets with regional transportation of livestock and produce. In general, the transportation of goods should be avoided, where the benefits do not justify the costs in terms of congestion, emissions, health and safety, etc.



185. The environmental activist George Monbiot eloquently summarises the situation: *"You enterprised a railroad through the valley," John Ruskin charged the railway companies in 1889. "the valley is gone, and the gods with it; and every fool in Buxton can be at Bakewell in half-an-hour,*



*and every fool in Bakewell at Buxton." What would he have made of the 21st century livestock trade? Every sheep in Northumberland can be in Devon in half a day. And their diseases travel with them. The modern food economy encourages long distance transport. Between 1965 and 1998, the international trade in food tripled, to 600 million metric tonnes. In Britain the transport of milk has increased 30-fold since 1980. "Scotch beef" and "Welsh lamb" come from animals pastured in Scotland or Wales for two weeks. They are trucked all over the United Kingdom so the stores can change their designation and raise the price of their meat. By trading directly with the big producers they control, the big chains have cut out the middleman. Livestock markets have disappeared, as have slaughterhouses. To sell animals to independent butchers, farmers in some parts of the country must drive them hundreds of miles. Superstores have centralised distribution networks, trucking livestock from Land's End to John O'Groats and the meat back to Land's End."<sup>75</sup>*

## The Local Mark



186. The Network examined the ways in which localised methods of production and consumption could be promoted. Awareness about the benefits of buying local food and supporting the local agricultural economy is increasing. Effective marketing could make local food more attractive than other food in a manner similar to that used for organic produce. With organic food it has been demonstrated that people are willing to pay more in response to fears over food safety, particularly in relation to genetically modified food and the prevalence of food related illnesses. The growth in popularity of farmers markets, in which farmers, growers or producers from a defined local area are present in person to sell their own produce direct to the public, has been a successful way of achieving this<sup>76</sup>.

187. Local food could be branded with an 'eco-concern' label similar to the 'organic' label. The aim is not that people be forced to eat only local produce but that customers have the information and the option to shop accordingly. Set up and administrated like the vegetarian society mark, a 'locally produced food' mark showing that the food was grown, picked and packed within 'x' miles of the point of sale could prove popular.

188. Reflecting the full environmental cost of transport in the price of food would help the successful development of a locally produced and consumed agricultural economy. If air travel in particular reflected more of the costs it imposes, beginning with the taxation of fuel, it would be more difficult for supermarkets to import food from distant places around the world. For example, food products are often grown in South America, mixed together in South Africa, packaged in Hong Kong and then flown into UK supermarkets. Such a step could raise concerns about the degree of variety offered by a localised food economy. However, globalisation has served to undermine the inherent diversity of British food.

Many varieties have dropped out of production because supermarkets have favoured standardisation and the economies of scale brought by bulk products.



## Greenbelt Garden Villages

189. An alternative approach is to develop links between supermarkets and local shops. The farm or village shop could act as an agent for the supermarket to sell the products that need to come from other places, reducing the need for people to travel to the supermarkets. Bulk is one of the issues that local shops have always been up against. As noted in the Rural White Paper there have been initiatives in this area: the Sainsbury's SAVE scheme allows village stores to stock selected own brand produce. Somerfield's Village Link offers free delivery of groceries and fresh produce to village stores within 10 minutes of a Somerfield main store.

190. In seeking to address concerns for localised production and consumption the greenbelt garden village vision has already been set out in section 1. One of the attractions of this concept is that whilst it is difficult to impose new planning constraints on people in an existing situation, it is easier to do so if it is on newly developed land where the conditions are known. People would know they could not have a car but could instead live in a very pleasant environment within 10 minutes of a bus, tram or train. The principle is similar to car free housing estates in urban areas. It is likely that such an environment would attract a particular type of resident. Fear of the unknown may make these environments less appealing to those who use cars a lot. It has been found that it is a lot easier to get people to join a car sharing club if they have not got a car already.

191. Concerns about development within the greenbelt should be allayed by the fact that the untouched rural idyll is a myth. Rurality is a social construct that is historically dynamic. A rural utopia is unlikely and we all have different ideas about what the countryside should be. This means that it can be valid to put greenfield land to productive local agricultural use to create sustainable communities.

# A VISION: SUSTAINABLE LOCAL LIVING



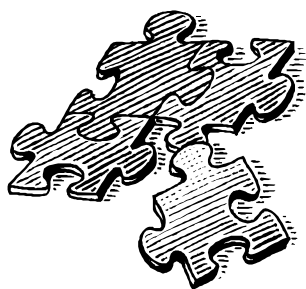
192. The planner- "Looking back it's hard to see what alternatives we had, but I am still proud of the way we managed to get sustainability to the top of the agenda when designing for the new communities. Of course, the cause was helped by the way the scale of the floods grew in the first decade of the century. Without such compelling evidence, I strongly doubt that we would have secured the funding for building the necessary infrastructure and providing such good services. The climate change awareness campaigns of those years certainly brought home the scale of the problem to the public and the 2005 projections of land loss to the elements over the following fifteen years certainly shook things up in political circles. Having to accommodate so many people in a comparatively short period of time rendered green belt development inevitable, but the fact that it had been necessitated by such clear environmental problems ensured that the garden village model gained a great deal of public support".

193. The village dweller- "I see that the last of the hypermarkets in the area has gone to the wall. It is always sad to see jobs lost but everyone knows that business success depends upon understanding and adapting to changing markets. Perhaps they were a bit like the dinosaurs, too big and cumbersome to adapt. I suppose I am one of the success stories. Setting up my own chain of locally sourced farm shops was largely a response to customer demand; the continual health scares over globalised and industrial food production produced a consumer outcry that perhaps no one could have predicted. The turn away from international food to the revival in the popularity of local and regional diversity was a pragmatic public response to environmental concerns. This pressure, allied to the revolt of the producers in response to attempts by retailers to pass on to them the expense of a rigorously pursued, environmentally

costed, food transport policy, helped see 'local organic' become the most desired label around".

194. The urban dweller- "The return to local sustainable urban communities was in many ways a reaction to the success of the garden villages. As the communities were replicated in the hinterland of towns and cities which were unaffected by flooding, it became clear that the scale of social change was considerable and that it was being driven as much by cultural aspirations as environmental necessity. I wanted to buy into that lifestyle but didn't see why I should have to move to do so. I wanted to stay in the urban environment with such easy access to my friends and leisure interests AND live in an environment where I could bring up a family. The government clampdown on land use efficiency through the GLUEINS really opened people's eyes to the sheer waste of land in most of our cities and gave the impetus to many projects which sought to turn unused or derelict buildings into well designed open spaces. I suppose it is quite ironic that the catalyst for car free housing estates and the revival of local urban communities centred around thriving shopping centres and mixed with extensive green areas should come from the supposedly 'dying' countryside environment".

# Conclusion



195. This report has presented four visions for land use planning and the Network discussion which inspired them. As well as thinking of new ways of applying current policy the Network looked ahead and took a longer term perspective of how we might plan our rural areas and towns and cities and took into account possible future directions for *society and lifestyles* as presented in the Network's first project report.

196. Although the four visions address different aspects of land use planning they also complement each other and might be seen as jigsaw pieces that could be used together for a coherent approach to future land use planning.

197. The Spider Web City is a vision of urban form that will enable its inhabitants to have a good level of mobility without needing to own personal motorised transport. In this vision, residents from all different parts of the city and its periphery have good local access to services. The 'Spider Web City' recognises that people have different needs and tastes and offers different environments in which to live.

198. The Informed Householder is a vision of a system that allows people to make a more informed choice of where to live which minimises their travel burden. It ensures that they have good access to services and provides them with the sort of the home they want.

199. Location, Location, Relocation is a vision which sees business located more efficiently in terms of transport. It results in a more balanced national distribution of employment in the UK. In the vision, business will no longer tolerate excessive travel being undertaken as part of its business and by its employees in getting to work. The vision is based on fiscal and educational measures to bring about change.

200. Sustainable Local Living is a vision which sees local economies revived by a concerted return to localised methods of production and consumption of goods and services inspired by a high social priority being placed on quality of life and sustainability. This, in turn, stimulates the regeneration of regions, as past specialisms in goods and services that have died out under national and international market pressures are revived. It appears quite possible that this vision is brought about as a consequence of environmental crises.

201. It is interesting to look at how the four visions fit into the three-way relationship between transport, land use and society which was introduced at the start of this report. The 'Spider Web City' involves a new model of planning land use and transport for which society would need to adapt. The other three visions involve socio-economic changes as well as planning measures. This illustrates the need to consider policies in many different areas.

202. A number of general issues have been raised in this report that address the heart of the challenge facing those attempting to develop solutions to land use and transport problems. It is clear that choice of location is a relatively long-term one for the majority of the population. As a result, people are significantly influenced not just by conditions today, but by what they believe will be conditions in the future. This suggests that Government needs well thought out, long term policies to assist people and businesses in making location choices that will be efficient for many years in terms of transport and other considerations. An alternative viewpoint is that in a fast changing world there is a need for locational flexibility in labour and housing markets. This suggests that the attachment in the UK to owner-occupier housing tenure needs to be weakened in order to have a more flexible and efficient labour market and to reduce travel.

203. The report highlights new opportunities for urban form. There are increasing examples of high density residential development that is attractive to people. This is usually medium rise buildings surrounded by well-landscaped grounds. Looking further ahead is the possibility of 3-D cities. To support such high density development it will be crucial to substitute urban highways with high capacity public transport and to enable local mobility through high quality pedestrian infrastructure. There is little reason in an economy based on the service and technology sectors why land use functions cannot be more highly mixed in the future, reducing the need to travel. Such a change in urban form in many ways can be seen as a return to the past, but the key point is that it has to meet the future needs of society.

204. What about rural areas, given the major changes proposed for urban areas? The Network's view is that there is little scope for planning to be used to assist in providing new transport systems in rural areas. The main objective for rural areas should be to preserve their character and the best way of achieving this is to assist the guardians of the countryside (notably farmers and managers of attractions) in the viability of their business without seeking to promote new developments or business activities unless their users are based within the community.

205. The creation of an 'information society' in which individuals and businesses are provided with the knowledge to appreciate much more fully and transparently the consequences of their location decisions is integral to the successful application of a wide range of the solutions and concepts proposed in this report. The captain of industry, the farmer and the office worker all have the potential to profit from the chance to make more informed decisions with the consequence of likely benefits being felt by wider society and the environment.

206. It is clear that in the past settlement patterns have become less sustainable as car use has increased. To some extent current planning policy is attempting to reverse this process by changing settlement patterns so that car use decreases. However, in this report the Network promotes a strategy where long term investment in appropriate transport schemes attracts development that can be serviced in an efficient and sustainable manner. Instead of a pipe end solution, this approach is an attack on the source of the smoke which has the potential to be much more effective.

207. Recent events have raised transport's profile in terms of Government priorities, but it will require a concerted effort by transport and planning professionals and interest groups and a change in public attitudes for the widespread changes to urban and rural living advocated in this report to be implemented.

208. A final point to remember is that although land use changes appear to be slow (we have all seen the construction of a new development take years to be completed) once they are realised they are going to be around for a long time. This reminds us of the great significance of where the anticipated four million or so new homes that are to be built in the next twenty years are located.





# Acknowledgements

The material in this report has arisen from the active contribution of the following individuals:

Mags Adams	Lancaster University
Jillian Anable	Imperial College
Simon Barnett	Suffolk County Council
Mervyn Bartlett	Surrey County Council
Mark Beecroft	University of Southampton
Jeremy Brooksbank	West Yorkshire PTE
Claire Burton	EPSRC
Robert Cameron	Highways Agency
Richard Case	Royal Borough of Kensington & Chelsea
Kiron Chatterjee	University of Southampton
Richard Clegg	University of York
Paul Croft	Regional Municipality of Peel, Canada
Mark Dougherty	Högskolan Dalarna, Sweden
Craig Drury	Oxfordshire County Council
Heather Fenyk	Rutgers University, USA
Garrett Fingerle	University of Southampton
Matthew Frost	Nottingham Trent University
Karen Geeson	Transport and Travel Research
Roger Geffen	Steer Davies Gleave
Natalie Grohmann	Transport and Travel Research
Victoria Hills	Steer Davies Gleave
Juliet Jain	Lancaster University
Richard Jones	Borough of Poole
Susan Kenyon	University of Southampton
James Killeen	Peter Brett Associates
Robert Kolbl	University of Southampton
Greg Lee	Colin Buchanan and Partners
Tim Long	North Wiltshire District Council
Glenn Lyons	University of Southampton
Mika Malmivaara	Transocean Oy Ab, Finland
Greg Marsden	University of Southampton
Graeme McLay	University of Southampton
David Milne	University of Leeds
Andy Nolan	e-volvenet Ltd
Tom Oldershaw	Tees Valley Joint Strategy Unit
Gordon Oliver	Babtie Group
Paul Parkhouse	Arup
Annette Pedler	TRL Limited

Richard Redfern  
Cullan Riley  
Tim Ryley  
Tim Schwanen  
Catherine Seddon  
Mark Silverman  
Dominic Stead

Caroline Stratton  
Jane Thompson  
Marielle Van Tellingen  
Nicky Ward

Oscar Faber  
Glanville Consultants  
Napier University  
Utrecht University, the Netherlands  
Anthony Bowhill and Associates  
London Borough of Hillingdon  
Technical University of Delft, The Netherlands  
Steer Davies Gleave  
Colchester Borough Council  
Heriot-Watt University  
Peter Brett Associates

# References

- <sup>1</sup> The RAC Foundation (1992). *Cars and the Environment. A View to the Year 2020*. London.
- <sup>2</sup> The Engineering Council (1997). *A vision for transport 2020*. Thomas Telford, London.
- <sup>3</sup> Department of Trade and Industry/Foresight (1999). *Environmental Futures*. HMSO, London.
- <sup>4</sup> Scase, R. (1999). *Britain Towards 2010. The changing business environment*. HMSO, London. Available (as at 25/06/01): <http://www.esrc.ac.uk/2010/docs/britain.html>
- <sup>5</sup> Tight, M., Bristow, A., Page, M. and Milne, D. (2000). *Transport - a Vision for the Future*, Landor, London.
- <sup>6</sup> Masser, I., Sviden, O. and Wegener, M. (1992). *The geography of Europe's futures*. Belhaven, London.
- <sup>7</sup> Banister, D. (2000) Sustainable urban development and transport- a Eurovision for 2020. *Transport Reviews*, 20(1), pp113-30.
- <sup>8</sup> Garrison, W. and Ward, J. (2000). *Tomorrow's Transportation: Changing Cities, Economies, and Lives*. Artech House, Boston.
- <sup>9</sup> Lyons, G., Chatterjee, K., Marsden, G. and Beecroft, M. (2000). *Society and Lifestyles: Number One in a series of Eight Reports from the Transport Visions Network*. Landor, London.
- <sup>10</sup> Lyons, G., Marsden, G., Beecroft, M. and Chatterjee, K. (2001). *Transportation Requirements. Number Two in a series of Eight Reports from the Transport Visions Network*. Landor, London.
- <sup>11</sup> Based on figure used in: Stead, D., Williams, J. and Titheridge, H. (2000). Land Use, Transport and People: Identifying the Connections. In *Achieving Sustainable Urban Form* (Eds. Williams, K., Burton, E. and Jenks, M.) E and FN Spon, London, pp. 174-186.
- <sup>12</sup> DTLR (2001). *Planning Policy Guidance Note 13: Transport*. Release date March 2001. Available (as at 25/06/01): <http://www.planning.dtlr.gov.uk/ppg/ppg13/index.htm>
- <sup>13</sup> See reference 12.
- <sup>14</sup> DETR (2000). *Planning Policy Guidance Note 3: Housing*. TSO, London. Available (as at 25/06/01): <http://www.planning.detr.gov.uk/ppg3/index.htm>
- <sup>15</sup> DETR (1999). *Towards an Urban Renaissance*, E & FN Spon, Andover. Available (as at 25/06/01): <http://www.regeneration.detr.gov.uk/utf/renais/index.htm>

- <sup>16</sup> DETR (1996). *Planning Policy Guidance Note 6: Town Centres and Retail Developments*. TSO, London. Available (as at 19/06/01): <http://www.planning.dtlr.gov.uk/ppg/ppg6/index.htm>
- <sup>17</sup> DETR (2000). *Our Towns and Cities: The Future. Delivering an Urban Renaissance*. TSO, London.
- <sup>18</sup> DETR (2000). *Our Countryside: The Future. A Fair Deal for Rural England*. TSO, London.
- <sup>19</sup> See reference 10.
- <sup>20</sup> Hall, P. and Marshall, S. (2000). *Land Use and Transport Study*. Interim Draft Report for the Independent Transport Commission.
- <sup>21</sup> See reference 11.
- <sup>22</sup> RICS (2000). *Transport Development Areas. A Study into Achieving Higher Density Development around Public Transport Nodes*, The Royal Institution of Chartered Surveyors, London.
- <sup>23</sup> Keeble, D. (1999) 'Collective Learning Processes, Networking, and 'Institutional Thickness' in the Cambridge Region', *Regional Studies*, 33(4).
- <sup>24</sup> *The Sunday Times* (2001). 'Shanghai plans a skyscraper for 100,000'. 25<sup>th</sup> February.
- <sup>25</sup> The Dismantlement Website. Available (as at 25/06/01): <http://www.dismantle.org/curitiba.htm>
- <sup>26</sup> Birk, M. and Zengras, P. (1993) *Moving Toward Integrated Transport Planning: Energy, Environment, and Mobility in Four Asian Cities*. International Institute for Energy Conservation, Washington, D.C. See also Solstice Crest Website. Available (as at 25/06/01): <http://solstice.crest.org/sustainable/curitiba/part2.html>
- <sup>27</sup> Pedler, A. and Paulley, N. (2000) 'TRANSLAND: The Integration of Transport and Land Use Planning, PTRC Conference Proceedings, September. See also TRANSLAND Website. Available (as at 25/06/01): <http://www.inro.tno.nl/transland>
- <sup>28</sup> METREX. The Network of European Metropolitan Regions and Areas. Website. Available (as at 25/06/01): <http://www.metrex.dis.strath.ac.uk/en/currects/handbook/copenhagen.html>
- <sup>29</sup> City of Seattle. Website. Available (as at 25/06/01): <http://www.ci.seattle.wa.us/planning/CompPlan/CP1-LandUse.htm>
- <sup>30</sup> Howard, E. (1898) *To-morrow: a peaceful path to real reform*. Swann Sonnenschein. Republished in 1902 as *Garden Cities for To-morrow*. Swann Sonnenschein.
- <sup>31</sup> See reference 30.
- <sup>32</sup> DETR (2000). *Quality and Choice: A decent home for all - The way forward for housing*. TSO, London.

- <sup>33</sup> DETR (2001). *1999/00 Survey of English Housing: Preliminary Results*. TSO, London. Available (as at 25/06/01): <http://www.housing.dtlr.gov.uk/research/hss/007/index.htm>
- <sup>34</sup> DETR Website. Available (as at 25/06/01): <http://www.housing.detr.gov.uk/research/hss/003/11.htm>
- <sup>35</sup> DETR Website. Available (as at 25/06/01): <http://www.housing.detr.gov.uk/information/keyfigures/index.htm#stock>
- <sup>36</sup> Besley, T. Preston, I. and Ridge, M. (1997) 'Fiscal anarchy in the UK: modelling poll tax noncompliance' *Journal of Public Economics* 64.
- <sup>37</sup> See reference 9.
- <sup>38</sup> The Cohousing Company Ltd. Website. Available (as at 25/06/01): <http://www.cohouses.net> and Ekologiskt Kollektivboende i Orhem. Website. Available (as at 25/06/01): [http://www.ekbo.se/hsb\\_brochure\\_english.html](http://www.ekbo.se/hsb_brochure_english.html)
- <sup>39</sup> See reference 32.
- <sup>40</sup> See reference 18.
- <sup>41</sup> See reference 9.
- <sup>42</sup> Economic and Social Research Council. Website. Available (as at 25/06/01): <http://www.esrc.ac.uk/2010/docs/britain.html>
- <sup>43</sup> See reference 32.
- <sup>44</sup> National Land Use Database (no date). The National Land Use Database Website. Available (as at 25/06/01): <http://www.nlud.org.uk/>
- <sup>45</sup> Guardian Website. Available (as at 25/06/01): <http://money.guardian.co.uk/advicebank/buyingahome/truecostofmoving/0,6450,131282,00.html>
- <sup>46</sup> Yes Online Estate Agents Website. Available (as at 25/06/01): <http://www.yes-property.co.uk>
- <sup>47</sup> Primelocation Website. Available (as at 25/06/01): <http://primelocation.com>
- <sup>48</sup> See reference 32.
- <sup>49</sup> DETR (2000). Social Exclusion and the Provision and Availability of Public Transport. Summary Report. Available (at at 25/06/06): <http://www.mobility-unit.dtlr.gov.uk/socialx/04.htm>
- <sup>50</sup> Begg, D., Fischer, S. and Dornbusch, R. (2000) *Economics*. 6<sup>th</sup> Edition, McGraw and Hill, London.
- <sup>51</sup> Glaister, S. and Graham, D. (2000) The effect of fuel prices on motorists. Report for AA Motoring Policy Unit and the United Kingdom Petroleum Association, AA, Basingstoke. September 2000.
- <sup>52</sup> DETR (2001) Personal Travel Fact Sheet, January 2001, <http://www.transtat.dtlr.gov.uk/facts/ntsfacts/nts/nts01.htm>

- <sup>53</sup> See reference 15.
- <sup>54</sup> Surrey County Council (2000) Local Transport Plan 2001/02 to 2005/06. Surrey County Council, Environment, County Hall, Kingston upon Thames. Available (as at 25/06/01): <http://ww2.surreycc.gov.uk/env/LTPlan/plan.nsf/webpagesall/Local+Transport+Plan+Introduction?OpenDocument>
- <sup>55</sup> See reference 27.
- <sup>56</sup> See reference 16.
- <sup>57</sup> DETR Website. Available (as at 25/06/06): <http://www.housing.dtlr.gov.uk/information/keyfigures/index.htm>
- <sup>58</sup> DoE (1987). *The Town and Country Planning (Simplified Planning Zones) Regulations 1987*. TSO, London. Available (as at 25/06/01): [http://www.scotland-legislation.hmso.gov.uk/si/si1987/Uksi\\_19871750\\_en\\_1.htm](http://www.scotland-legislation.hmso.gov.uk/si/si1987/Uksi_19871750_en_1.htm)
- <sup>59</sup> See reference 10
- <sup>60</sup> Wootton, J. & Marsden, G. (2001). The Local Transport Plan Submissions. A report to the Public Policy Committee of the RAC Foundation, University of Southampton.
- <sup>61</sup> United States Environmental Protection Agency. Website. Available (as at 25/06/01): <http://www.epa.gov/superfund/>
- <sup>62</sup> See reference 17.
- <sup>63</sup> See reference 18.
- <sup>64</sup> Department for Environment, Food & Rural Affairs. Website. Available (as at 25/06/01): <http://www.defra.gov.uk/>
- <sup>65</sup> See reference 9.
- <sup>66</sup> Letsbuyit.com. Website. Available (as at 25/06/01): [http://letsbuyit.com/en\\_GB/](http://letsbuyit.com/en_GB/)
- <sup>67</sup> Brown, P. (2001). 'Rural young losing out as rich move in- Special report: the countryside in crisis' *Guardian*, 6<sup>th</sup> January.
- <sup>68</sup> See reference 18.
- <sup>69</sup> Millennium Dome Website. Available (as at 25/06/01): <http://www.dome2000.co.uk/static/flash/index.htm>
- <sup>70</sup> See reference 17.
- <sup>71</sup> Greater London Authority. Website. Available (as at 25/06/01): see [www.london.gov.uk/mayor/housing\\_commission/exec\\_summary5.htm#point7](http://www.london.gov.uk/mayor/housing_commission/exec_summary5.htm#point7)
- <sup>72</sup> Atlapedia online. Website. Available (as at 25/06/01): <http://www.atlapedia.com/online/countries/netherla.htm>
- <sup>73</sup> Black River Boats. Website. Available (as at 25/06/01): <http://apollo.intrstar.net/~brb/>
- <sup>74</sup> F.McCourt (1999). *Angela's Ashes: A Memoir of a Childhood*. Flamingo

- <sup>75</sup> G. Monbiot, 'How the Superstores Gave Us Foot and Mouth'. Available (as at 25/06/01): <http://www.zmag.org/Commentaries/donorform.htm>
- <sup>76</sup> National Association of Farmers' Markets Website. Available (as at 25/06/01): <http://www.farmersmarkets.net>